SKETCH

OF THE

NORTH-WEST OF AMERICA.

BY MGR. TACHÉ,

BISHOP OF ST. BONIFACE,

1868.

TRANSLATED FROM THE FRENCH, BY CAPTAIN D. R. CAMERON,

ROYAL ARTILLERY.

Montreal:

PRINTED BY JOHN LOVELL, ST. NICHOLAS STREET.

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The deep interest which now attaches to everything connected with the North-west Territories, induces the Translator to hope that this work may not be unacceptable to the public.

Few, if any, have had so good opportunities as Bishop Taché for obtaining information regarding the country his Lordship describes; and, although he may not be so sanguine as many others are about the capabilities and future of the North-west, the facts, which his Lordship's long residence there enables him to give from personal experience, shew conclusively, that the climate, soil and mineral resources of the country are such as must render it highly attractive to the emigrant.

Ottawa, April, 1870.

SKETCH

OF THE

NORTH-WEST OF AMERICA.

When writing "Vingt Années de Missions," we were aware how imperfect the work was, and that, to render it interesting, there were wanting, amongst other things, explanations touching the character and history of the country which had been the theatre of the missionary labors we described. We did, indeed, promise to supply explanatory notes on these points, but frequent long journeys and other business prevented our then carrying out the intention to which we now apply ourselves.

Neither the church nor geographical division of the country supplying us with a single name by which to designate it, we shall adopt its commercial title, that is to say the name by which that part of British America is known in the great mercantile organization of the Honorable Hudson's Bay Company.

"The Northern Department" includes all that will be treated of in this sketch.

This vast country is bounded to the south by the United States, or the 49th parallel of latitude, to the west by the Rocky Mountains, to the north by the Arctic Sea, to the east by the straits and gulfs which connect Baffin's Bay with Hudson's Bay, 2ndly by Hudson's Bay itself, (not including James's Bay), 3rdly by a line connecting Cape Henrietta with the 40th parallel of latitude, following the watershed between Hudson's Bay, properly so called, and James's Bay with Lake Superior, or, for simplicity's sake, let us consider 90° W. long. as the eastern boundary.

The continental portion of this vast Department includes, then, the country between 49° and 70° N. lat. In the south it stretches from 90° to 115° W. long., and in the north from 90° to 140° W. long.

The breadth of the country from west to east is, in round numbers, 1200 English miles, and its length from south to north is 1500, giving the immense area of 1,800,000 square miles, without estimating the Arctic Islands anciently and recently discovered.

There is a striking contrast between the vastness of this territory and the smallness of others occupied by some of the most powerful nations in the world; and, the comparison naturally suggests the enquiry: Are these vast solitudes to remain for ever in the condition in which Providence has hitherto kept them?

Alone in these boundless deserts, one listens here for a loud echo of the noise and stir in the world beyond the sea, of the more feverish bustle and the bolder ambition of the neighboring great Republic, or of the Dominion of Canada springing into existence. Our beautiful and large rivers, our immense lakes, are they never to carry but the light bark canoe, and the heavy oared barge of the fur dealer? The agricultural resources of the country, its mineral riches, the wealth of its forests and of its streams, whatever they may be—are these destined never to be known or appreciated at their true value? Is there nothing here worthy the attention of man? Is there sufficient to encourage those who dream of its brilliant and prosperous future? Is the severity of its climate fatal to enterprise? Will its soil repay the labor of cultivation, or will it vainly drink up the sweat of the husbandman's labor? Bounded as we have described, is the Northern Department accessible? Or, to reach it, must one have the hardihood of adventurers who would seek riches at any cost, all the self denial of those who thirst after the safety of souls, or the insatiable curiosity of the tourist? The glaciers of the north are certainly an impassable barrier; the Rocky Mountains on the west present very great difficulties there; on the other hand, the height of lands to the east is not a serious obstacle and the 49° parallel does not even undulate on the vast plains to the south; in short, then, it is not impossible to reach this place, the journey is even comparatively easy, and I invite my friends to take an excursion, which will surely not be without a certain charm.

I wish I could satisfy the legitimate curiosity of serious men who think of this country: I wish above all to supply information to those who are interested in us. But for a full description volumes would be necessary, and I can only offer limited information, and a

few general observations on a country about which there have been very contradictory statements.

Those who have hitherto seen nothing in Canada, but "a few acres of snow," would see here only a few leagues of ice, where cold blooded animals, or such as hibernate, can alone exist. Optimists, on the other hand, appear to think this as good as any place in the world; that if we have a great deal of ice, so much the better for us;—with them, ice is a luxury, and so on. I cannot pretend to give all the information that may be desirable, but I hope that this little sketch may at least assist in making the country of my adoption better known. However feebly it may shine I shall at all events derive satisfaction from having sacrificed, to the good pleasure of a few friends and the desire of being useful to them, the repugnance I have to writing on a subject so foreign to my occupations and ordinary duties.

I shall divide the work into two parts. In the first I shall give an insight into the state of the Northern Department, and in the second I shall take a rapid glance at its history.

FIRST PART.

To attain the object which we have set before us in the first part, that is to describe the natural and social condition of the country, we shall divide it into seven chapters.

In the first chapter we shall examine the country from an economic point of view, enlarging upon the returns to be expected from its soil and climate, and enumerating its vegetable products.

In the second chapter we shall touch upon the country's hydrography, which treats of its natural routes of communication with their greater or less advantages.

In the third chapter we shall examine the political state of the country.

In the fourth its commercial system.

In the fifth we shall enumerate the ecclesiastical divisions of the country.

In the sixth the various tribes inhabiting it.

And in the seventh we shall refer to such of the animal kingdom as are most remarkable.

Geographical maps on a small scale will be attached to the first four chapters to assist the description.*

CHAPTER I.

RESOURCES OF THE NORTHERN DEPARTMENT.

Regarding the resources and future of the Northern Department, the country may be divided into two very dissimilar portions which we shall distinguish as the Northern and Southern Divisions. The division may be marked by a diagonal line drawn from the south-eastern extremity of the country to Mount Traffic near 64° N. lat., and 128° W. long. Of course nature has drawn no such geometrically straight line; yet, the accuracy with which the

* The maps referred to have not been published with the Bishop's pamphlet.

imaginary line divides the country, in accordance with the view we are taking of it, is surprising.

NORTHERN DIVISION.

Three ranges of mountains appear to have determined the geometrical figure of the great continent on which we live.

The great chain of the Rocky Mountains—which, although undulating, has no break—follows the longest line which can be drawn on North America, and stretches from the Arctic Ocean, in which it bathes its first links, to South America, laying down in its ramifications the boundary which establishes the parallelism of the western coast of our continent.

A second chain, that of the Alleghanies, not so extensive as the former, establishes, on *its* side, the direction of the eastern coast. This chain starting from the Gulf of St. Lawrence stretches across the United States to Alabama. There it leaves power to the fury of the Atlantic waves to hollow out the Gulf of Mexico, until checked by the Rocky Mountains. The latter line that Gulf into which the Mississippi pours the tribute of streams that water a great portion of the vast plain lying between the two mountain ramparts.

A third chain of mountains determines the eccentric form which the continent assumes at its northern extremity. It perfects the embankments of the mouths of the giant rivers of the north and east, and borders the north and east of some of the largest lakes in America. It is the chain of the Laurentides forming the bank of the great Canadian river from its mouth to Cape Tourmente, near Quebec, and which, satisfied with having held the great river in check, leaves it at this point to make room for the magnificent lands that border it above. Further on, the range, after crossing the Ottawa, bends towards the south as if again to look on the St. Lawrence near Lake Ontario. Thence the Laurentides stretch towards Lake Huron, which they border on the east, then they reach Lake Superior, whence they pass towards the Arctic Ocean by the North-west route, forming in the latter part of their course a portion of the contour of the great Winnipeg, Athabaska, Slave and Bear Lakes which they leave on their west. As is apparent, the curve described by this chain of mountains is very analagous

to the parallelism of the northern coast of the continent, even including the extensive and eccentric encroachment of Hudson's Bay.

From what has been said, it appears that the chain of Laurentides traverses the whole of the Northern Department. It does not retain, however, the elevation which distinguishes it on the banks of the St. Lawrence ; but it is still the same range, and of the same formation. This collection of hills,—here they are but hills,—has a general direction from south-east to north-west ; and this is the explanation of nature herself having traced the all but straight line to which we alluded as separating the Northern from the Southern Division of the Northern Department. The Laurentides, however, do not exactly follow the straight line. Here is their divergence : From the south-east extremity of the Department they stretch towards the east, encroaching upon the Lake of the Woods and the two banks of River Winnipeg as far as the lake of the same name, which they skirt to the east and the north. Thence they run west-nor'-west, and passing to Beaver Lake seize on Rapid River (*à la Pente*) and further on possess themselves of the whole of Churchill River ; leaving the last river at Lake Primeau they there curve with a more marked inclination to the north. These hills then reach Lake Athabaska, which they almost entirely surround, and to which they give the English name " Lake of the Hills." The Laurentides then continue the same direction to form the northern and eastern shores of Great Slave Lake, and, further on, of Bear Lake. The diagonal line to which we referred follows this general direction except at its two extremities ; for on leaving Great Slave Lake the chain passes in a straight line to Mount Traffic, and in the south the diagonal strikes the Laurentian formation, and brings it into the Southern Division. We thus cut off from the northern division the angle formed by the lines which we have just traced, and this because its advantages connect it with the Southern Division. On the other hand we have cut off from the Southern Department a section which the Laurentian range would leave to it, but which, from a profitable point of view, would naturally be rejected on account of the severity of its climate. In short, we consider the boundary of the Northern Division to be an imaginary line drawn, as we have said, from the south-eastern extremity of the Department to Mount Traffic. This portion of

the country is perfectly waste, covered for the most part with primary rocks of the Laurentian system. It includes, too, the "Barren grounds," and the Silurian formation of Hudson Bay, and of the banks of Mackenzie River, as well as the lignite beds of the latter. It can never be otherwise than a field for hunting and fishing. The climate is everywhere very severe, cultivation impossible, pasturage entirely wanting, and the timber of inferior quality and of miserable growth. There are, of course, exceptional spots, but these are few. And I think there need be no boldness in asserting that this part of the country will remain as it is, and will never be inhabited except by Indians and by hardy and venturesome fur-hunters. It is quite possible that great riches lie in the midst of this desolate waste; but of what use, particularly in places where frost of eight successive months and more makes the earth almost as hard as the heavy masses of granite that generally cover it? Some lakes abound in fish. Animals with the richest furs move about there in great numbers, displaying in the midst of desolation the silky richness of their covering.

The two seaports of the country, of which only one is used, are in the Northern Division. It will presently be seen that this advantage is very much diminished by difficulty of navigation.

If the Southern Division becomes populated, if communication becomes easier, if many things, which do not exist, spring up in the course of time, then, perhaps, the desolation which reigns over those lands may lose some of its sternness.

With the information I possess,—the changes which I dream of, as others do, for this Division, appear to me to be impossible in the Northern Division. I cannot imagine anything there different from what it now is; the Indian, hunting, fishing and starving; the trader collecting rich furs; the poor missionary laboring for the salvation of abandoned souls, and—if you will—some factories, provisioned with imported supplies at great cost. This Northern Division then, at once deprives about two-thirds of the Northern Department of any prospect of a brilliant future, or even of any probable change.

To such as desire to engage neither in hunting nor in trading for furs amongst the Indians, the Southern Division is alone worthy of attention.

SOUTHERN DIVISION.

While including in this Division all the country which is not included in the preceding, I could not forget that here, too, there are several spots or even districts of considerable extent little favorable to the clever combinations of economists. I included them, however, in one division, because a portion offers real agricultural advantages. There are, it is known, mineral riches in it, and great ways of communication: what is wanting at one point may sometimes be found at another; the less advantageous places must be passed over to reach those which are more advantageous; and in short taken altogether they form a whole, at least in some respects, Yet, for the sake of clearer apprehension, I shall subdivide the Southern Division of the Northern Department into three sections, which I shall call "desert," "prairie," and "forest."

1st. The desert.—This word will not surprise those who have studied the western part of North America. Every body has heard of the great American desert, but all may not know that it extends into British possessions, passing the boundary at 100° W. long. and 49° N. lat., then following a line more or less winding, in a general nor.'westerly direction, passes still further towards the north and bends again to the north-west at 113° W. long. and 52° N. lat.; thus forming an area of at least 60,000 square miles. Here is a desert,—an immense desert. It is certainly not everywhere a plain of moving sand, and quite dried up; but it is quite vain to think of forming considerable settlements on it. Prairie hay (*Systeria dyctaloides*) is almost the only plant which is seen growing on its arid soil. A narrow border of alluvial soil marks its water courses, and these are dry nearly throughout the year.

The prairie hay supplies pasturage of the best kind: not only the buffalo delights in it, but horses and other draught animals are very fond of it. This herb, barely six inches high, of which the plants grow so sparsely as to leave the sand or gravel on which it grows everywhere visible, preserves its flavor and nourishing power, even in the midst of the rigors of winter, to such an extent that a few days grazing on one of these remarkable pasturages suffices to restore horses worn out by work to good condition.

Beyond this advantage, and the game to be found there, I don't know of anything on this vast plain which could attract the attention of economists.

The wearied eye seeks in vain for a shore to this ocean of short hay. The weakened traveller sighs in vain for a stream or a spring at which to quench his thirst. The heavens, dry as the earth, hardly ever grant their dews and beneficent showers. The dryness of the atmosphere aids the aridity of the soil; some places of which the geological formation would appear to favor vegetation, produce no more than the naturally sterile ground. One travels across this desert for days and weeks without seeing the smallest shrub. The only fuel procurable by the traveller or hunter is buffalo dung, which our Half-breeds call "bois de prairie" (prairie wood.) Then this desert has its winters,—severe winters, with violent wind, and a temperature often below 30° centigrade.

Very distinguished men in the United States do not fear to wound national sentiment by proving the small real advantages of a great part of the west. Here is what Professor Henry says:—

"The whole extent of country to the west between the 98th meridian and the Rocky Mountains, called "the great American Plains," is an arid desert over which the eye may wander to the horizon without seeing anything to relieve its monotony... And perhaps we shall surprise the reader by drawing his attention to the fact that this line, which is drawn southward from Lake Winnipeg to the Gulf of Mexico, divides the surface of the United States into two very nearly equal parts. When properly understood this statement will serve to dissipate some of the dreams, regarded as realities, about the destiny of the western part of the continent of North America; but truth in the end takes precedence of praiseworthy patriotic sentiment."

This opinion, so frankly expressed, is corroborated by that of Major Emory on the frontier commission of the United States: "Hypothetical geography is pushed sufficiently far in the United States. In no other country has it been carried to such a point, or has it been followed by such disastrous consequences. This pernicious system was commenced under the eminent auspices of Baron Humboldt, who, because he had made some trips to Mexico, attempted to describe the whole of North America. He was surrounded by people who had personal ends in view. In this manner it happened that,—without other proofs than such as were furnished by men travelling on mules, at full gallop across the continent,—the opinion of the country was held in suspense on the subject of a suitable

route for a railway, and there was even created in the public mind a preference in favor of a route which explorations had demonstrated to be the most impracticable of all the routes between the 49th and 32nd parallels of latitude. On the same kind of ill-founded information, maps of the whole continent have been engraved and published in the very best style of art, and sent to receive the approbation of Congress and the praise of geographical societies here and abroad; while those who have really contributed to sound geography have seen their works robbed and disfigured, and themselves neglected and forgotten. Whatever may be said about them, these plains to the west of the 100th meridian are quite incapable of supporting an agricultural population so long as you do not go sufficiently to the south to meet the tropical rains."

So much for the American desert in the United States. It is the same desert which does not fear to cross the 49th parallel to stretch over British possessions up to the 55nd parallel—following, however, the diagonal we referred to in tracing its limits.

The plateau of the *Grand Coteau* (watershed hills) *du Missouri* which extends into our desert, preserves its geological character there. Apart from its elevation, its tertiary strata attract attention while the rest of the desert belongs rather to the cretaceous system. Very high downs and rocks of various ages everywhere bear witness to the violent action to which the land has been subjected.

This desert then deprives husbandry of one tenth, at least, of the Southern Division, and here already is a shadow clouding the brilliant picture which often presents itself to the minds of those who look towards the Far-West, and who, seeing the sun going down behind the Rocky Mountains, easily conclude that the land gilded by its setting rays must all be, some day, covered with abundant crops.

2nd. The prairie or plains. Let us leave the desert to enter a more agreeable region,—that of the prairies. These plains about which I am going to speak have, in some places, a little of the aridity of the neighboring desert without its sterility; elsewhere, this resembles forest land, without its depth; the whole forming a distinct country worthy of the greatest interest, without, perhaps, having all the advantages attributed to it. Our prairies rest on the 49th parallel of latitude and on the desert about which we have just been speaking. To the north they are bounded by the wooded country; in other directions they are also bounded by

wooded country, on which they yearly encroach and from which they are at present separated by a curved line that, waving irregularly to the north of the Saskatchewan, crosses it near the mouth of its southern branch, and thence proceeds in a straight line to the foot of Riding Mountains to cross the extremity of lakes Manitobah and Winnipeg, and stops at the height of lands which was formerly the bank of the lake that has been replaced by Red River Valley.

It is difficult to give, even approximately, the area of these prairies. I reckon them as being about equal to the desert country, that is 60,000 square miles.

The great expanse of the prairies tells plainly that their geological formation must vary. The prairie which touches the desert includes, like the neighboring country, secondary formation, while towards its extremity it has transition rocks: for example, the calcareous strata of Red River and the coal fields of the Saskatchewan. The Silurian system occurs in its neighborhood and sometimes runs into old red sandstone. Extensive deposits of sulphate of soda are found in the neighborhood of the calcareous strata and elsewhere. The valleys of rivers and the drying up in the forests, everywhere multiply recent formations. There are thick alluvial beds there, and these become covered with vegetable deposit, sometimes also of great depth.

The poor colonist who has labored at clearing the dense forest land of Canada, who can only plant his land after a terrible struggle with the giants that cover it, and after having dug it out to great depth in order to extract innumerable enormous roots—he, no doubt, naturally conceives a hatred for forest land. He has expended too much labor and exhausted too much of his resources to believe in the superiority of this kind of land. It appears to him that open country, where nothing more is necessary, so to speak, than to put the plough in the ground, is a fortunate country. From this point of view, prairie has an unquestionable advantage; but as nothing here below is perfect, the advantage has its disheartening compensation in a very great scarcity of timber and firewood. Time, far from bringing a remedy, increases the evil. Fires, which destroy even forests, rob the prairies of such small advantages as they may have in this respect. I have crossed well wooded districts where a few years afterwards I have suffered from cold, not finding wherewith to supply the smallest fire. The conflagrations are more mnuerous in proportion to the increase of travellers. They are

becoming more difficult to check as they find fuel in greater abundance and more combustible on the scene of their last depredation.

To the buffalo hunter, the prairie is a country without equal. Winter and summer—there is his empire, there he finds true happiness in urging his swift steed in pursuit of prey, until recently so abundant and easy; it is there that without obstacle and, so to speak, without labor, he lays out roads, bounds over space, and enjoys a spectacle often grand although a little monotonous. Seen in the flower season the prairie is really beautiful, for its verdure-covered ground is quite enamelled with different colors. It is a rich carpet of which the various tints seem to have been arranged by the hands of an artist; it is a sea which, on the least breath, undulates its scented waves. The plain, sometimes so uniform as to shew an apparently artificial horizon, suddenly changes into rolling prairie. Its beauty then increases; a thousand little hills now raise themselves here and there, and by their almost regular variety give the idea of waves on the ocean in the midst of a great storm. It appears as if the powerful hand of the Ruler of seas, mocking the fury of the waves, had seized them at the instant of their rising, and by a peremptory order, changed them into solid land. In many directions erratic stumps, seen on the top of downs or hillocks, appear in the distance like the petrified spray of foaming waves. Elsewhere the prairie is planted with clumps of trees and dotted with lakes as pleasing as they are various in form. Here are basins which one would say were the reservoirs of great rivers, and of which the sides carry visible marks of the levels, once assigned by the Supreme Artist to these dried-up ponds. Excepting the wild and rugged beauty of large mountains, excepting the view of a great sheet of water bathing a beautiful roadstead, and excepting all natural beauty improved by the art—it is difficult to imagine anything more beautiful, or at least prettier and more lovely, than are some parts of the rolling prairie. One might easily believe oneself to be in an immense park of which the rich proprietor had called into requisition the most skilled talent. In the midst of these clumps, of these groves, of the rich verdure, of variegated flowers, of innumerable lakes, one asks: Where is the owner to whom belongs the large herds quietly grazing in the distance? Who has tamed this gazelle, so fleet, so graceful, that approaches, as if to salute the traveller—that fear startles away, that curiosity turns back again? These packs of wolves that sport

round you, that bark, that howl and snarl in turn, are they the impatient pack waiting for the signal to start in pursuit of game? Then in autumn what a variety, what a number of aquatic birds cover all these lakes? Ducks sport themselves in thousands, the swan—that *habitué* of all beautiful artificial waters—is there swimming about with majestic negligence and cooing its mysterious song. Oh yes! the prairie is beautiful; and since we want here only people and homes, there are certain spots that I would gladly point out to amateurs.

I am not surprised at the impression produced on the tourist while he experiences the real delights of a summer excursion over these plains. Men, whose opinion must have weight, have, perhaps, occasionally experienced this delightful influence, and have given a preference to the prairies to which they are not entitled in every respect. Here comes the end of August. Already cold is threatening; severe frosts prevent the ripening of cereals and expose them to complete destruction. At other times a similar result may follow drought. We are on the skirts of the desert, its scorching winds rush over the prairie protected by no elevated land. The freezing wind, little less obstructed on its way from the Arctic regions, combats with its violent rival, and the prairie, the scene of this struggle, sees many hurricanes and hail storms very destructive to the crops. Enormous hail-stones have fallen on the prairie; over large districts not only is the hay destroyed but the soil is as it were harrowed. Then often, too often, the desert sends out its myriad of grasshoppers over the prairie, and their serried squadrons are devouring phalanxes that do not hesitate to starve the poor settler.

Winter has arrived in the beginning of November and continues more or less in April, and, Great God! what winter! One must travel in the midst of these vast plains and camp out during entire weeks in the midst of these snowy oceans to understand how scarce wood is there, and yet how necessary it is.

These clumps, these groves, the strip along the banks of the rivers and of some of the ravines, no doubt, border the space, diversify the scenery, break the horizon, delight the eye of the tourist who desires only pleasure, and who contents himself with a tuft of grass, because it is pleasing to his sight and shelters him, during his siesta, against the heat of a burning sun. But how all this beauty fades! How it dies with the leaves that it beautifies!

I have travelled on the prairies of the Northern Department, I

have crossed them frequently, and still I ask myself, what can a large population do on these plains? I except the prairies of the upper part of the northern branch of the Saskatchewan, where the proximity of the Rocky Mountains insures the supply of some of the wood required in the settlements that might be formed there. I except, also, the valley of Red River and the Lower Assiniboine because there, too, the prairie touches on wooded country. On the rest of the plains I do not see the elements necessary for prosperous settlements. I have read glowing reports upon these plains; they brought out all the advantages, they particularly described the quantity of wood. But book in hand I saw the country described, and I asked myself, who is the dreamer,—the author or the reader?

The only woods of any importance on the prairie,—that is, *timber*, are the different kinds of poplar, but particularly aspen and some birch. In Upper Saskatchewan, at a very few points on the road, there are also found white spruce and some larch. Out of Red River valley and the Lower Assiniboine there is no hard wood; it does not exist to the west of 101° W. long., where the few solitary and inferior specimens that are met with could not be regarded as a resource. I say, then, that from the 101st meridian up to the Rocky Mountains, a distance of about 900 miles, there is not wherewith to make a substantial road. Birch is certainly a pretty wood for cabinet work, but it does not withstand the weather, and cannot be used in work requiring solidity. This kind of wood, too, is not common on the prairie.

An exploration was made across these plains with a view to establishing a telegraphic line. Those who originated the scheme and did not carry it out have been very much blamed. Greater indulgence would have been extended had the report of the conscientious engineer, who made the explorations, been known. The difficulty, or rather physical impossibility, of obtaining telegraph posts caused the project to be abandoned.

With these facts before me I am inclined to think that I have ascribed too narrow limits to the desert, for really, from an economic point of view, it occupies nearly half the area of the prairie, that is to say all its centre, leaving only its outskirts fit for occupation. It may be truly said in a general way that prairie soil is very fertile; but the centre is certainly not so fertile as are the outskirts.

I have already said that the climate is severe, yet the severity of our winters does not prevent extreme heat in summer. We have extreme heat and extreme cold. Never having had instruments upon whose perfect accuracy I could depend, I do not venture to submit the meteorological tables I have made; but I have noted a common centigrade spirit thermometer every day during ten years. Thrice during that period it has recorded 40° below zero, and it has also thrice marked 40° above, and on one occasion even 43°.

During whole months in winter we have a mean temperature of 30° below zero in the mornings: while at midday in summer, we have a mean of 30° above zero in the shade. I shall content myself with these few figures: too many would be required to give an exact idea of our temperature, or of its fitness for farming. Accurate information on this subject must be founded on a series of daily observations, during several years, at different hours of the day and night. For agricultural purposes, only false conclusions are to be derived from the study of the mean temperature for each month, for such mean temperature does not exclude sudden and very great decrease of heat, which, although temporary, has not the less a very injurious effect upon the produce of the soil; and this is not indicated by figures shewing only the mean temperature. All the prairie region is subject to these sudden changes, which often cause very great mischief. I have known the whole harvest crop seriously damaged by a severe frost during the night 9th to 10th August, although both days had been intensely hot.

Snow thaws very rapidly on the prairies, because there is little of it, and the country is very open. Thus it is frequently practicable to sow during the latter half of April. This advantage, unfortunately, is often cancelled by frosts in May. My thermometer once indicated 15° of cold on the 14th to 15th night of May, while in the same month of the same year it marked 25° of heat. These violent and sudden changes, in reality, do away with the superiority of the prairie climate, as indicated by mean temperature.

The figures representing the mean temperature of the months, during a year in which the limited observations were made, have determined the isothermal lines, and greater experience proves that they are not to be depended upon. These lines are fundamentally wrong, for, I repeat, a single night is sufficient to destroy all analogy with the climate of the country to which they refer.

To-day, the 8th of April, my thermometer marks 22° below zero, while the last days of March promised us a very early spring.

The following indicates the division of the seasons and their more striking characteristics:—

Spring.—From the 15th April to the 31st May, windy, cold and disagreeable; severe frost during the nights.

Summer.—June, July, August, hot; little rain; strong wind; cold nights towards the end of August.

Autumn.—September and October, calm, serene; very agreeable weather; nights generally very cold; heat often intense during the day, except in the last week of October. In autumn there is little or no rain, which accounts for the destructive prairie fires occurring at this season of the year.

Winter.—November, December, January, February, March and the first half of April. Little snow, biting frost, keen, constant and very dry until the month of March. Atmosphere generally very clear, as is the case during the rest of the year.

I have read, somewhere, that our climate is not very severe, and this statement, written by some one who had been in the country during summer, was founded on the fact that Indians and Half-breeds sleep in the open air without other protection than a blanket and a buffalo robe. Understanding well the weight which such a statement must have with those who are inexperienced, all here know that it is incorrect. I am not an Indian, yet how many winter nights I have spent under the beautiful stars, without any robe at all. Does it follow that the temperature was mild? No, for often mercury is frozen during entire weeks. One cannot say how much he can stand without experiment. If I am told that horses pass the winter in the open, I simply reply that they do likewise at Athabaska and at Mackenzie River where, nevertheless, the intensity of cold is very great. This circumstance, so remarkable to those unaccustomed to this country, instead of proving the mildness of the climate, proves the constancy of cold. Not only does snow not melt in winter, but it does not even soften, thus it does not become icy nor acquire, what is well known in Canada as "crust." The horse, by pawing, can easily remove the covering of snow from off the grass, and feed,—which would be impossible were the snow to harden.

Proof of this statement is furnished by some winters milder than

others. If, by chance, it rains during winter, if there should be a thaw, or, in short, if the winter is milder, it becomes fatal to horses wintering in the open. This very winter presents a striking example. Our horses here at Red River, where winter is very severe, are not stabled. In Dacotah Territory, where it rained in December, horses not stabled are dying in great numbers. The horse, although an animal of a milder climate, nevertheless withstands the lowest temperature. Surprise at seeing horses wintering in the open is nothing more than what Europeans experience on seeing Canadian horses, after long journeys, standing out for hours together without suffering in the least. The fact, then, that horses can live without stabling does not prove the mildness of the climate, but simply the abundance and superiority of the immense pasturages left for their use. This, indeed, is the unquestionable advantage of the prairie country. If there be many things wanting to shelter man, and to feed many industries, it has, at all events, wherewith to feed innumerable cattle, not only in consequence of its extent but from the character and richness of its growth, equalling the finest clover. It is known that in cold countries grass acquires a nutritive power which its juices have not time to develop in milder climates.

Such is the fattening effect of natural prairie grazing, without other assistance, upon our slaughter animals, that in no very long time, when they are healthy, they become worthy of the first markets.

The recollection of what happened here last year, obliges me to add that our prairie pasturages have, and perhaps always will have, the disadvantage of being infested by insects which, flying in dense clouds, torment cattle. Upon the whole, however, these prairies, so long as they are not cultivated, will furnish an extensive and unequalled resource for the rearing of cattle. I am sorry that I cannot assign to them equal importance in other respects, appearing to me to involve essentials of prosperous and extensive settlement.

At the risk of appearing to be unreasonably retrograde, I dare positively affirm that not more than one-half of the area of the prairie within the limits I have ascribed to it, or within the region usually called the Fertile Belt of the Northern Department, is fit for settlement, and that this half has not all the advantages attributed to it.

Let me be pardoned for disarranging the symmetry of that

fertile belt which has been called the "Rainbow of the West." More cultivable land will be found in the forest region than has been lost from the prairie.

3*rd. The Forest.*—Under this head I include all of the Northern Department about which I have not already spoken, an area of about 480,000 square miles, placed between the Northern Division and the prairie region.

The forest country assumes a little of the character sometimes of the one and sometimes of the other. As we said above, the prairie is encroaching upon the forest. Aided by the destroying element it has reached close to the banks of lakes "la Biche" and "Froid," to the north of Beaver River. Further to the west it touches Upper Athabaska River. Peace River and even Mountain River, (rivière aux Liards) have their prairies. But as these small divisions and distinctions necessary in detail are not so when treating the subject in a general way, I shall still use the term "forest," as including all that is within the line I traced to separate the Northern from the Southern Division and the line drawn to mark the boundary of the prairie.

In the forest country, such as I have described it, are to be found nearly all of the geological features which mark the other regions. Crystalline rocks, which border it almost throughout its whole length, enter it at its south-eastern extremity. To the west of Lake Winnipeg begins the Silurian system, which is contiguous to primary rocks almost uninterruptedly up to the Rocky Mountains. Then come the other formations which share this vast region.

If the word "forest" conveys an idea of labor, of suffering and often of want, to the settler who clears his holding with painful toil, it sounds far differently to the ear of the undaunted lumberer who seeks, from this great growth of the earth, its contingent of riches and its assistance, indispensable to colonization, to navigation and to arts and manufactures, that he may give to the wealthy the luxury of furniture and equipages, to the poor the tools necessary for their work, to all a greater or smaller part of their habitations.

The Canadian who has visited the timber yards and wharves of his country, and who sees the useful wealth piled in these wood stores, must experience satisfaction at the thought that from the forests of Canada, comes the rich, various and extensive supply.

The collection of woods at the Universal Exhibition of 1857 excited the wonder and admiration of all who noticed them. Why is not satisfaction and admiration equally lively amongst those who study the forests of the Northern Department?

Here is a list of the most important trees to be found in the forests of the Northern Department.

I have borrowed from Abbé Ovide Brunet's "Catalogue des Végétaux Ligneux du Canada," as well as from Sir John Richardson's list, the classifications of the plants enumerated below.

Other trees may be found in our forests, but I am acquainted with only those mentioned here.

CONIFERÆ.

Red pine ..... Pinus resinosa.
White pine ..... Pinus strobus.
Grey pine ..... Pinus banksiana.
Balsam fir ..... Abies balsamea.
White spruce ..... Abies vel picea alba.
Black spruce ..... Abies vel pinus nigra.
Grey spruce ..... Abies vel pinus grisea.
Tamarack ..... Larix Americana vel microcarpa.
White cedar ..... Thuja occidentalis.
Red cedar ..... Juniperus Virginiana.
Common juniper ..... Juniperus communis.

CUPILIFERÆ.

Red oak ..... Quercus rubra.
Post oak ..... Quercus obtusiloba.
White hazel nut ..... Corylus Americana.
Beaked hazel nut ..... Corylus rostrata.
Iron wood ..... Ostrya Virginia.

SALICACEÆ.

Among the numerous kinds of willows "salix rostrata" and "salix longifolia" are most common

Aspen ..... Populus tremuloides.
Balsam poplar ..... Populus balsamifera.
Cotton wood ..... Populus grandidentata.

BETULACEÆ.

Canoe birch .....Betula papyracea.
Alpine birch .....Betula nana.
Low birch .....Betula pemila vel glandulosa.
Green alder.....Alnus viridis.
Common alder .....Alnus incana.

ULMACEÆ.

White elm .....Ulmus Americana.
Slippery elm.....Ulmus fulva.

OLEACEÆ.

White ash.....Fraxinus Americana.
Black ash .....Fraxinus sambucifolia.

ACERINEÆ.

Sugar maple .....Acer saccharinum.
Red maple.....Acer rubrum.
Dwarf maple.....Acer spicatum vel montanum.
Striped maple .....Acer Pensylvanicum.
Ash leaved maple ....Negundo Fraxinifolium.

TILIACEÆ.

Bas wood.....Tilea Americana

CORNEÆ.

Red osier.....Cornus stolonifera vel alba

VITACEÆ.

Winter grape .....Vitis cordifolia.
Wood bine.....Ampelopsis quinquefolia.

ROSACEÆ.

There are several kinds of wild roses, Rosa woodsii, Carolina blanda and majalis.
Wild plum .....Prunus Americana.

Wild red cherry.....Prunus Pensylvanica.
Choke cherry.....Prunus Virginiana.
Dwarf cherry .....Prunus pumila.
Black cherry.....Prunus serotina.
Seven bark.....Spiræa opulifolia.
Common meadow sweet.....Spiræa salicifolia.
Wild red raspberry .....Rubus strigosus.
Black raspberry.....Rubus occidentalis.
Dwarf raspberry.....Rubus triflorus.
White flowering raspberry .....Rubus nutkanus.
Bake apple .....Rubus chamæmorus.
Bramble.....Rubus arcticus et rubus acaulis.
Scarlet fruited thorn.....Cratægus coccinea Bourgeau.
Pear thorn.....Cratægus tomentosa (Bourgeau.)
Cockspur.....Cratægus crus galli.
Choke berry.....Pyrus arbutifolia.
Canadian mountain ash.....Pyrus Americana.
Shad-bush .....Amelanchier Canadensis.

This family supplies us also with the most delicious wild strawberry.

GROSSULACEÆ.

Wild gooseberry ..... Ribes cynosbata.
Sharp thorned gooseberry.....Ribes oxyacathoides.
Smooth gooseberry .....Ribes hirtellum.
Swamp gooseberry .....Ribes lacustre.
Red currant .....Ribes rubrum.
Fetid currant .....Ribes prostratum.
Common gooseberry .....Ribes Hudsonianum.
Wild black currant .....Ribes floridum.

CAPRIFOLIACEÆ.

Snow berry .....Symphoricarpus racemosus.
Wolfe berry.....Symphoricarpus occidentalis.
Small honey-suckle .....Lonicera pariflora.
Fly honey-suckle.....Lonicera ciliata.
Mountain honey-suckle ..... Lonicera cerulea.
Bush honey-suckle ....Lonicera trifida.
Black fruited elder .....Sambucus Canadensis.

Red fruited elder	Sambucus racemosa vel pubens.
Ship berry	Vibernum lentaga.
Maple leaved arrow wood	Vibernum acerifolium.
High cranberry	Vibernum opulus.
Cranberry	Vibernum edule.

ERICACEÆ.

Tea berry	Gaulteria procumbens.
Bear berry	Arctostaphylos uva ursi.
Alpine bear berry	Arctostaphylos Alpina.
Labrador tea	Ledum palustre.
do.	Ledum latifolium.
Snow berry	Chiogenes hispidula.
Dwarf blueberry	Vaccinium Pensylvanicum.
Canada blueberry	Vaccinium Canadense.
Bog bilberry	Vaccinium uliginosum.
do.	Vaccinium myrtilloides.
Dwarf bilberry	Vaccinium cæspitosum.
Cow berry	Vaccinium vitisidea.
Small cranberry	Vaccinium oxycocus.
Common American cranberry	Vaccinium macrocarpon.

At the first glance the preceding list appears to make our forests much richer than they can claim to be throughout their extent, as several species of the woods noted are to be found only on very limited areas. Entire families are thus limited, as I shall explain in the following remarks:

Sugar maple, properly so called, and hard wood scarcely reach the south-eastern extremity of the Northern Department. There are three other varieties of maple to be found there in small quantity, but surprised at being deserted by the sugar maple, they do not spread beyond the Lake of the Woods. Red and white pine do not extend beyond Lake Winnipeg. The two kinds of cedar, oak, elm, ash, vine, bas-wood, and plum, while much inferior, wherever found, to the same kinds in Canada, are confined to a very small area, for they do not grow beyond the 100th meridian, and any exceptional trees found beyond this limit are quite valueless. The maple of the country, (*Negunda fruxinisolium*) of which the sugar is very similar to that of the sugar maple, properly so called, extends westward to the 107th meridian and northward to the 55th parallel.

Excepting the foregoing there are no other full-grown forest trees, at least to the west of the 100th meridian, but poplars, the different kinds of spruce, grey pine, balsam fir and birch. White spruce is our finest and most useful wood; red pine the only durable wood, and birch the only wood fit for cabinet work.

The grey pine rarely attains sufficient dimensions to fit it for large work. The balsam fir is still smaller. Shrubs are found everywhere according to the character of the soil.

What precedes sufficiently proves, that not only are our forests of less importance than those of Canada, but that generally they do not produce the kinds of wood most required in practical life, and that in this respect they leave much to be desired, even by those who are most easily satisfied.

The districts of Rainy River, of Lake of the Woods, of Winnipeg River, the islands on Lake Winnipeg and the country between Lake of the Woods and Red River, are the only places well wooded as regards the description of timber, and will be an immense resource for the colony of Assiniboia, where already is felt the want of this remote supply. The beautiful wooded belts which formerly bordered Red River and the Assiniboine have already suffered serious injury.

At many points of what we call the forest, and occasionally at very great distances, the most useful kinds of wood, which formerly occupied the ground, have been completely destroyed. In the centre of the forest, fire has done incalculable and irreparable injury.

A melancholy spectacle is presented by wood through which fire has passed for the first time. Huge, half-burnt trunks stand erect, shorn of branches, sapless and lifeless, awaiting sadly for another conflagration or a strong wind to prostrate them on the bare ground; then they lay piled in horrible confusion until the destroying element, laying hold of them for a third time, completes their destruction. Of whatever kind, their cinders generally feed a nursery of aspens, which almost invariably springs up in the place of primitive forest, excepting, however, on sandy hills where the grey pine shoots out its tap-root.

Having supplied a list of our most important woods I would now complete this subject by giving a catalogue of all the flora of the North-west. As it is impossible for me to accomplish this desire I give instead an analysis of the collection made by Mr. Bourgeau, the botanist attached to Captain Palliser's expedition during the years 1857-'58-'59.

ANALYSIS OF THE COLLECTION OF PLANTS, MADE BY MR. BOURGEAU, OF PALLISER'S EXPEDITION.

This analysis is the enumeration of Genera, Species, and the habitat of Families,

HABITAT.	FAMILY.	GENERA.	SPECIES.	UNDETERMINED.	In British North America. GENERA.	In British North America. SPECIES.
					*	*
a.	Ranunculaceæ	11	32	..	18	72
d.	Minispermanceæ	1	1	..	1	1
c.	Berberideæ	1	1	..	3	5
b.	Sarraceneæ	1	1	..	1	1
d.	Nymphaceæ	1	1	.	3	4
a.	Papaveraceæ	1	1	..	3	3
b.	Fumariaceæ	1	2	..	4	9
a.	Cruciferæ	14	31	7	25	104
d.	Capparideæ	2	2	..	2	2
d.	Cistineæ	1	1	..	3	5
b.	Violaceæ	1	8	..	1	18
b.	Polygalaceæ	1	3	..	1	7
b.	Droseraceæ	1	1	...	2	9
b.	Lineæ	1	2	..	1	3
a.	Caryophylleæ	6	17	3	12	66
d.	Paronychieæ	1	1	..	2	2
c.	Malvaceæ	1	1	..	3	5
d.	Filiaceæ	1	1	..	2	2
d.	Hypericineæ	1	1	..	1	8
c.	Acerineæ	2	3	..	2	8
c.	Oxalideæ	1	1	..	1	5
c.	Geraniaceæ	1	4	..	2	6
b.	Balsamineæ	1	2	..	1	2
d.	Rhamneæ	2	2	..	2	6
d.	Anacardiaceæ	1	2	..	1	6
a.	Leguminosæ	13	50	7	26	98
a.	Rosaceæ	16	48	7	24	124
b.	Haloragеæ	3	4	..	4	10
a.	Onagrariæ	3	13	2	6	28
b.	Grossularieæ	1	7	..	1	16
b.	Crassulaceæ	1	2	..	2	3
b.	Araliaceæ	1	3	..	3	7
b.	Corneæ	1	4	..	1	7
c.	Rubiaceæ	2	5	..	5	15
b.	Valerianaceæ	1	1	..	2	6
d.	Lobeliaceæ	1	1	..	1	6
a.	Ericaceæ	7	9	..	10	40
b.	Primulaceæ	7	10	..	8	23
b.	Gentianaceæ	2	6	..	8	34
c.	Asclepiadeæ	2	5	..	1	11
b.	Hydrophylleæ	1	1	.	2	5
c.	Solaneæ	2	5	2	5	8
b.	Labiatæ	9	9	..	24	40
a.	Scrophulaineæ	7	24	2	20	74
b.	Plantagineæ	1	2	..	1	5
a.	Polygonaceæ	4	14	..	5	24
b.	Chenopodeæ	8	17	1	8	20

HABITAT.	FAMILY.	GENERA.	SPECIES.	UNDETERMINED.	In British North America. GENERA.	In British North America. SPECIES.
					*	*
b.	Elagneæ	2	3	..	2	3
c.	Euphorbiaceæ	1	1	..	2	8
a.	Salicaceæ	1	28	..	1	44
d.	Cannabinaceæ	1	1	..	2	2
b.	Retulaceæ	2	4	..	2	11
b.	Typhaceæ	2	3	..	2	4
b.	Naiades	2	4	..	4	14
d.	Hydrocaideæ	1	1	..	2	2
b.	Trideæ	2	2	..	2	8
b.	Melanthaceæ	4	4	1	5	5
d.	Commelynaceæ	1	1	..	..	....
a.	Gramineæ	33	62	..	49	153
a.	Zycopodiaceæ	1	4	..	2	12
d.	Loaseæ	1	1	.	1	3
d.	Cactaceæ	1	4	4	1	2
c.	Cucurbitaceæ	1	1	..	2	2
a.	Saxifrageæ	4	15	..	8	56
b.	Umbelliferæ	10	14	1	28	30
d.	Loranthaceæ	1	1	..	1	1
b.	Caprifoliaceæ	6	13	..	7	24
a.	Compositeæ	40	112	8	70	321
a.	Campanulaceæ	1	2	..	1	8
b.	Vaccineæ	2	....	..	1	16
b.	Pyronaceæ	2	5	..	5	16
d.	Oleaceæ	1	1	..	1	3
c.	Apocyneæ	1	2	..	1	4
a.	Polemoniaceæ	3	5	..	3	13
c.	Convolvulaceæ	1	1	..	3	6
b.	Boraginaceæ	8	17	2	5	27
b.	Verbenaceæ	1	1	..	2	7
b.	Lentibularieæ	2	2	..	2	8
d.	Nyctagineæ	2	2	..	2	3
c.	Amarrinthaceæ	1	1	..	1	6
b.	Santalaceæ	1	2	..	1	2
d.	Aristolochieæ	1	1	..	1	1
c.	Cupuliferеæ	3	4	1	5	15
b.	Salicineæ	1	3	..	1	4
b.	Urticaceæ	3	3	..	4	8
b.	Conifereæ	5	13	47	7	20
b.	Aroideæ	3	3	..	6	9
c.	Alismaceæ	3	5	..	2	3
b.	Orchideæ	8	13	..	16	54
b.	Liliaceæ	11	20	..	16	45
a.	Juncaceæ	2	13	3	2	23
a.	Cyperaceæ	5	68	4	8	218
b.	Filices	13	17	..	17	47

NOTE.—The plants marked (*a*) are found in the Arctic region; (*b*) in the Circum-Arctic region; (*c*) in the Central District, or wooded belt; (*d*) the families of the Canadian District, or of the Pacific Coast, or of the arid district of the Centre.

The columns marked with an asterisk are borrowed from the tables given in Sir John Richardson's "Arctic Searching Expedition," 1851, vol. II, p. 322.

Summary of the foregoing list of Mr. Bourgeau's collection.

819 species.
349 genera.
92 families.

Of these families:

a. 19 are found in the Arctic region;
b. 40 in the circum-Arctic;
c. 14 in the central district of the wooded belt;
d. 29 are confined to the arid central district, and to the eastern and western wooded districts.

Of the same families, Richardson has enumerated, as being found in British North America and Russia:

471 genera.
2155 species.
118 families.
509 genera.
1725 dicotyledons.
554 monocotyledons.

2279 species.

The region which I have described under the head "Forest" includes an immense number of lakes: some are very large, as Lake Winnipeg; others, very numerous, stretch from 36 to 60 miles; and there are numberless lakes of all sizes. So numerous are they in some districts, that Indians who cultivate land have nearly always to make use of small canoes which they carry from one lake to another. I have crossed as many as twenty of these lakes in one day in winter; and in a six days' journey I do not think that I passed over 10 miles of dry land, yet I did not follow a canoe route. This observation leads to my remarking that a very large area of the forest region is water, and involves a large deduction being made from it as uninhabitable. The area of uninhabitable country is nearly doubled by adding swamps and land subject to annual inundations, to the lakes properly so-called. It is true that clearing land will render it salubrious by a natural process. Proof of it is seen in prairie land recovered from forest, where there are depressions—old swamp ground—without the least moisture;

and even on perfectly dried up new prairie land, beaver dams are to be seen—certain evidence of the existence of lakes or ponds at the time when the place was wooded.

The large and averaged sized lakes are generally stocked with fish. The small ones are without this resource, and their multiplicity has, moreover, the disadvantage of unfavorably affecting the temperature.

All the small lakes freeze to a great depth in winter. During May and a part of June, the sun, in melting their thick coating of ice, wastes the heat which the neighboring soil would otherwise abundantly utilize; and this happens without compensation, for the early frosts, even in midsummer, are more frequent and intense in the neighborhood of small lakes, and particularly in the neighborhood of swamps.

Large lakes produce an exactly contrary effect. In their neighborhood, even in high latitudes, harvests are much more certain. They protect the produce of the earth against injury from cold, and the reason of this is easily understood:

When the volume of their water has been warmed, it is not affected in the course of a night by the changes of temperature to which the atmosphere is subject. The warm vapor rising from their surfaces neutralizes the cold of the currents of air coming from a distance.

On the cleared borders of Ile à la Crosse or even of Athabaska Lake, harvests of wheat and vegetables are certain, while they are very precarious at a distance from the water. On low ground and in swamps, it freezes every month in the year, and cultivation is impossible. This, I consider, proves that the borders of average sized lakes, where land is naturally productive and elevated, are much fitter for settlement than the prairie itself.

But if I had to draw a fertile belt instead of making a rainbow in heaven or on earth, I would extend the limits of the prairie and stretch them into the forest region, along the banks of the great streams; for the region is traversed by beautiful rivers that will probably some day see settlements disputing with them the possession of their banks. Rainy River is one of these streams, notwithstanding the swamps which encroach on its lower banks.

There are great advantages offered by nearly all the rivers flowing from the Rocky Mountains. Protected by this powerful ram-

part in one direction ; in another, they have not to fear the injurious influence which northerly winds in the east acquire in sweeping over the far encroaching Hudson's Bay. Nor need they dread the injurious influence I ascribed to southerly winds rushing with unchecked violence across the desert that, so to speak, goes as far as the Gulf of Mexico to meet them. Were it not for the distance of the rest of the world, and the difficulty of communication, the plateaux that border these beautiful rivers would, ere this, have been occupied. But how can a population be transported so far ?

The little colony of Red River has already suffered for too long a time, and still suffers too much, from its remoteness, for me to be able to estimate the difficulties attending such settlements, and the responsibility incurred by those who are too eagerly encouraging their establishment.

CHAPTER II.

HYDROGRAPHY.

One easily understands the necessity there is for studying the water courses of the Northern Department, with a view to forming an opinion regarding the relative merits of the routes of communication and the opening out of the resources of the country.

For the sake of clearness I shall describe the three great basins of the Northern Department separately. They are the Arctic Basin, the Winnipeg Basin, and the Intermediate Basin.

THE ARCTIC BASIN.

This basin includes several rivers of importance, some as routes of communication, others, from historical associations.

Mackenzie River is the great artery of the Arctic Basin, or of the north-western region throughout its length, from Mount Hooker to the Arctic Ocean. This giant river receives the tribute of all the streams in the territory on its left, and on its right, it loses only those which flow directly into the Arctic Ocean. I place the source of the river near Mounts Hooker and Browne, at the head of Athabaska River, close to the sources of Columbia River, for, in a straight line at all events, this is its most distant part from its mouth. This magnificent stream receives, besides a multitude of small tributaries, the waters of Lesser Slave Lake, *lac la Biche*, Clear-water River, the great Athabaska Lake and Peace River; crosses the south-western part of Great Slave Lake, and further on receives Mountain River, *rivière aux Liards*, and the river of Great Bear Lake.

At different places along the stream the river is known by different names. It bears the name Athabaska between its source and the little affluent from *Lac la Biche*. It then borrows the name of the latter until it is joined by Clear-water River, better known as "*la petite rivière Rabaska.*" It then becomes Athabaska River up to the lake of that name, or "*Lac des Collines.*"

Then it is Rock River, of which the continuation is called Slave River until it loses itself in Great Slave Lake. From its escape from this lake to its mouth it is known as Mackenzie River.

The river is navigable, if not from its source, at least from Jasper House to its mouth, a distance of about 2,000 miles. In this long line, navigation in boats of the country, is interrupted at only two places: by the group of rapids in the *rivière à la Biche*, and one in Slave River. The latter rapids, at about 1200 miles from the Arctic Ocean, present the first obstacle to vessels going up stream. Vessels of less draught could easily navigate from above these rapids to the foot of river *à la Biche* rapids, but not at all seasons of the year, as when the water is low there are numerous sand banks in the way. From the latter rapids to Jasper House the current is exceedingly strong, and the water generally shallow; so that here, navigation is very difficult and possible only in boats of the country when powerfully propelled.

The breadth of the river—at first only about a quarter of a mile—gradually increases, but irregularly. In some places it is two miles broad; and, in short, as regards its length and its volume of water, is one of the finest rivers in the world.

From its source to Lake Athabaka the water is muddy, being strongly charged with clay and sand, that form shifting banks difficult to become familiar with and to avoid. The turbidness of the water increases the inconvenience of these obstructions.

During July this river, like all others rising in the Rocky Mountains, experiences a sudden increase, due to the melting of snow. In its upper part particularly, it then becomes an impetuous tor rent, and navigation is very difficult, and often dangerous. This happens frequently, when there is intense heat of several days' duration in the snowy region. The phenomenon lasts generally inversely as its intensity.

The delta of Athabaska River at its entrance into the lake of the same name is remarkable, and all the more so as it is also acted upon by a great stream, Peace River, whose mouth is quite close to it. These two powerful streams carry with them, besides sand and clay, a great quantity of *débris*, and this heaped against the south-western shore of the lake, forms the tongue of land that separates the two great sources of Mackenzie River. The tongue is not yet completed. Rivers *d'Embarras* and *d'Epinettes*, Lake Mamawee,

the *Quatre Fourches* and very numerous water courses intersect the tongue of land, and are still waiting for its completion. The channels of several of the branches of the delta change their direction as the water rises and falls in Athabaska and Peace Rivers. Some of them cut the tongue of land at right angles to the main streams. When the water is high, a portion of the delta is submerged. The high points covered with hay then form small islands, generally of an oblong shape, that look like the twine of an enormous net, of which the gigantic meshes are represented by the small sheets of water separating the islands. Hence the name Athabaska or Ayabaskaw (net of hay) that our "*voyageurs*" often pronounce Rabaska.

The southern border of Great Slave Lake, from a combination of circumstances similar to that I have just described, is being gradually increased by deposits from the rivers discharging into the lake, and by the north winds, which are strongest and most common, driving *débris* towards the southern shore, the lowest and easiest to stick to.

Upper Athabaska River flows through a fertile and well wooded country. After an extremely rapid descent from the great mountains, it receives the water of Lesser Slave Lake, a magnificent basin, a kind of enormous fish-pond, 75 miles long and 30 miles broad, whose shores rise like an amphitheatre and are very picturesque. This tributary on the left, has its pendant in the beautiful *Lac la Biche*, a little further down on the right. The latter lake is not so large as the former, but it is quite as deserving of praise, and is surrounded by a very fertile country, very well suited for colonization. From *Lac la Biche* there is a land road to Red River and, therefore, to the United States. Already traffic passes along this road, and *Lac la Biche* may become the centre of the trade which will be carried on along the whole of Athabaska-Mackenzie River.

The next most important tributary is Clear-water or Little Athabaska River. This delightful little stream, rising to the east of Methy Portage, has, up to the present time, and in spite of the difficulties of navigation, enjoyed almost the exclusive privilege of supplying a route to Athabaska-Mackenzie. On descending from the heights of Methy Portage one takes boat on this little river, which, in order to keep the traveller in the midst of the

beauties it presents to his view, places obstructions in the way necessitating the *portages* of White Mud, the Pines, Big Stone, the Nurse, and the Cascades. The river is not navigable by other boats than those of the country, and, even then, the navigation is not easy.

Descending the great river, one enters Lake Athabaska at its south-western extremity. It is a beautiful expanse of deep limpid water, measuring over 200 miles in length at an elevation of about 600 feet above sea-level. This lake does not pay tribute to the giant river of the north until it has itself received, as tribute, a share of Lake Wollaston. The latter, like Island Lake from which Clear-water River flows, does not decide on a northerly course until it has given a share of its water to Churchill River, of which it feeds the tributaries.

I said that Peace River joins the great stream a little below Athabaska Lake. Many consider Peace River to be the source of Mackenzie River. It is of less importance to discuss this opinion than to make known the river itself. Peace River is, unquestionably, one of the most beautiful in the country, perhaps in the world. Its navigation, at any rate in boats of the country, is uninterrupted, except by a small fall and a few rapids. These obstructions might be removed by works of secondary importance, and then the river would be navigable, throughout its length, for boats of considerable size, and this, too, nearly throughout the summer.

Flowing through a valley as beautiful as it is rich, the stream rises in the Rocky Mountains, quite close to the sources of the celebrated Fraser River, with which, as River Athabaska does with Columbia River, it forms a water channel that almost uninterruptedly connects the Arctic Ocean with the Pacific.

The route is certainly not without difficulties, but these are much less than would naturally be supposed to be connected with crossing the Rocky Mountains by water. It was discovered by Mackenzie in 1793, and has been used by fur traders. There are those who maintain that it is the natural road to the North-west. The valley watered by Peace River cannot but become peopled, and then many inquisitive and interested individuals will admire this grand stream that is now probably regarded with indifference by the poor family of beavers living on its banks.

Passing from Peace River to Slave River, let us rapidly descend the latter to its falls, which we shall avoid by way of Chest Portage (*Portage de la Cassette.*) This is the beginning of the second group of rapids on Mackenzie River. The first group, in River *la Biche*, is formed by calcareous strata crossing the stream; this one is due to azoic spurs which come here to salute the great river, or to test its power by throwing obstacles in its way, but unable to check the violence of the stream, the furious river bounds over the obstructions, making amends to itself for its exertions by a magnificent display of falls and rapids. The traveller has time to gaze on the scene, for, besides the Chest Portage, he has also to pass Raft Portage (*d'Embarras*), Burnt Portage (*Brulé*), Mountain Portage, and lastly the Portage of the Drowned (*des Noyés*).

As we cast a last glance at this rugged picture, let us take courage to continue the journey, while we regret that we do not find a fine ship here, which might now take us on, without hindrance, to the whale fisheries of the Arctic Ocean. In default of this means let us embark in the barge which awaits us. Fifteen miles further on we shall pass Salt River; and if we have not yet acquired the habit of eating entirely without salt, we can lay in a supply from the crystal-covered sides of the river, which look like banks of snow. Still further on, after passing another delta, we shall have an unbounded view across Great Slave Lake, another fresh-water sea. Stony Island, a naked mass of granite, tells us that, on the east and north, this great lake, like all its giant brothers, is solidly banked with primitive rock; while, to the south and west, the shore is limestone. The lake is one of the largest in the world. Its depth is equal to that of Lake Superior; its waters are grand, and maintain an immense number of fish. Unfortunately its navigation is certain only from the beginning of July to the middle of October.

Having crossed Great Slave Lake the great river takes, definitively, the name of its discoverer. Before descending this part of the stream, let us land, and be more polite than we have yet been, for up to the present time we have visited no one *en route*. Here there are missionaries, a bishop and priests. Sisters of charity also reside on this bank, at Providence, the residence of the Vicar of Mackenzie River.

Let us proceed again, and stop at the mouth of another large

river, that called Mountain River, or *Rivière aux Liards*. Those who would learn how a large river pours down over scarped heights, and how our *voyageurs* are bold enough to trust themselves on roaring waters which rush with frightful noise between their confining walls, such have only to ascend Mountain River. At first they will have no difficulty, but I promise them excitement as they approach the summit of the mountains. They will go close to the sources of Pelly and Lewis Rivers, which, with Mountain River, form another almost uninterrupted water-connection between the seas on the north and the west.

In descending Mountain River one has to firmly grasp the boat, as, at many points, the current is so violent that the steerer lashes himself to the boat to avoid being violently pulled out of his place by the blows which the water gives to the helm he holds in his hand.

Having returned to Fort Simpson, where Mountain River flows into Mackenzie River, let us continue our course down the latter, to admire the wild beauties it presents to us. Now it is the chain of the Rocky Mountains which the river, in its turn, goes to salute. This powerful wall drives back its swift visitor which occasionally alters its course, to avoid an encounter. Further on it appears as if the impatient river, rushing against rocks instead of describing numerous curves, had thrown itself across the enormous masses that confine it on either side. Numerous affluents descend to it from the mountains, bringing tribute from lakes.

Having examined the coal beds, and the lignite basin across which the great river flows here—there is before us a hill over 600 feet high, cut vertically, that invites us to view a large river flowing at its base; it is the Great Bear Lake River. We may ascend it, to visit the enormous lake that gives it its name; but let us not forget that it is covered with ice during eleven months in the year, and that we cannot, therefore, stay long, however great the interest it may excite by its size, or by its historical associations from having been made the winter quarters of Arctic expeditions. An additional reason for our feeling an interest in this lake, is that its exceptionally severe climate has not deterred the missionary who carried the torch of faith there. We shall visit that missionary at Good Hope, the last of our stations. Let us pass over what is called *the rapid*, and which, when the water is low, may occasionally falsify my

statement, that the river is navigable for large vessels to the Arctic Ocean, where it flows out across a delta of alluvial land.

The Arctic Basin includes several other rivers which, although practically useless, are not without interest, and have been rendered celebrated by the names and adventures of the noted travellers who have explored these inhospitable shores. Coppermine River is the first of these which have attracted attention. Its investigation was the object of the first land expedition made in the Arctic regions, that of Samuel Hearne, in 1771. Then Fish or Back River, which, like the preceding, has been the theatre of many stirring scenes, and witnessed the last land expedition, made by Anderson and Stuart in 1855. It was at the mouth of this river that the discoveries were made which put an end to the uncertainty about the fate of Franklin and his courageous companions. I shall refer to these rivers when I treat of the history of the country.

2nd. WINNIPEG BASIN.

The description of this basin quite naturally includes that of the great streams flowing into Lake Winnipeg, and passing thence into Hudson's Bay. I shall add a few words about the principal rivers flowing into the same bay, to the west of Nelson River, which I shall include in the Winnipeg Basin, to avoid multiplying divisions.

Lake Winnipeg is in the centre of an immense plateau. The large rivers which drain the plateau converge towards it; they flow from the east, the south, and the west, and having mingled their waters pass through a common channel into that great salt lake—the Hudson's Bay.

Lake Winnipeg, which formerly covered thrice or four times the area it now occupies, still spreads over a great space. It is said to occupy 8,500 square miles. Its greatest length is 280 miles, and its breadth varies between 6 and 60 miles. Numerous observations have established its height above sea level to be between 600 and 630 feet. Its depth does not exceed 12 fathoms. Its water is none the more limpid from beating against the granite on its eastern shores, and the sand and limestone on its western coast. It is *Winnipeg* by nature as it is *the Winnipeg* of the Indian. In Algonquin the name means *dirty water*, and if the lake is not muddy, neither is it so clear as large lakes usually are.

Lake Winnipeg has floated other boats than canoes and ordinary barges. Archeologists of the future will like to know that the first decked boats which navigated this sheet of water were built at Norway House in the winter of 1831-32. They were named GEORGE and ALEXANDER. These two small schooners of 30 tons sailed for only ten years. In 1842, ISABELLA and MARY, each manned like the former by four or five men, replaced their predecessors, wiping out the recollection of them without increasing their own *éclat*. In 1848 MARY was consumed by fire, and in 1855 ISABELLA was wrecked on shore. Lake Winnipeg, who sorrowed over the loss of her little flotilla during nine years, gladly received little POLLY in the spring of 1866, and has suffered her to rule since then.

With a view to studying Lake Winnipeg, as a means of communication, I shall examine its affluents : 1st from the east, 2nd from the south, 3rd from the west, and 4th from the north where is the only outflow from the lake.

1st. *Affluents from the east.* This great lake naturally has several rivers flowing into it from all directions. Of those flowing from the east, I shall mention only two : Berens River (*aux Tourtes*) whose mouth is nearly at the centre of Lake Winnipeg and is of importance only because the small boats of the two trading posts on its banks pass to and fro on it ; and the large and beautiful River Winnipeg, which, as a route of communication, rising at the heights separating Canada from the territory of the North-west, naturally excites the liveliest interest. This stream has been the subject of special study, particularly during the summers of 1857 and 1858. I borrow the following figures from the official reports then made. One of the sources of River Winnipeg is at Savanne Portage, afterwards expanding into the *Lac des milles Lacs*, and flowing on as River *la Seine*. The whole up to Little Falls, about 65 miles, is navigable by small steamers, thence to Rainy Lake, about 67 miles, it can only be navigated by canoes, and here goods must be carried by land.

From the beginning of Rainy Lake to the end of Lake of the Woods, including Rainy River which connects these two beautiful sheets of water, the distance is about 208 miles, and steam navigation would be interrupted only at the Great Falls of Fort Francis. This grand fall, twenty feet high, would necessitate locks. In short, the water route of which we are speaking, from its source to the end of

the Lake of the Woods, has obstructions considered insurmountable for 72 miles of its length, while 263 miles are navigable. It must not be thought that the navigable portion, especially the upper division of it, is without difficulties. I think that in practice many disappointments will be experienced:—but then what rivers are there which, in so long a course, do not present obstacles? Supposing this route to be adopted as an important line of communication, the result indicated by the surveyors would follow the completion of the proposed works. It is to be regretted that Winnipeg River ceases to be navigable at the point where it assumes its name, that is to say, from Rat Portage, where it receives the waters of Lake of the Woods, to Fort Alexander, where it flows into Lake Winnipeg. This portion of the stream for a distance of about 160 miles has so many rapids, falls and cascades that it is impossible to imagine it can be made use of for any other kind of boat than that now used on it. Bark canoes pass over rapids with the greatest ease, and behave almost equally well on the rocks along the banks. The barges, employed in addition to canoes, are 30 feet keel measurement and of 4 or 5 tons burthen; they are propelled in calm weather with six or eight heavy oars. These oars are not so easily worked as light paddles; the barge does not fly over the water like the bark canoe, yet with a long oar for a rudder our dexterous *voyageurs* easily steer it in the midst of ordinary rapids, and fifteen men can draw it over the steepest portages. This is the only kind of boat which can be used on Winnipeg River. Enormous works would be required to improve the navigation of this stream. River Winnipeg has twenty-six portages. At one place it takes the name of *White River*, because the water is everywhere foaming from the rapids being very continuous.

The most remarkable affluents of River Winnipeg are, on the north, Little English River which empties *Lac Seul* and is the canoe route, *viâ* Albany River, to the post of that name on Hudson's Bay, and on the south, the chain of lakes which was formerly the canoe route *viâ* Grand Portage and Pigeon River. Vermilion Lake also drains into Winnipeg River.

To obviate the difficulty presented by River Winnipeg, as a route of communication, it has been proposed to make a road from Shoal Lake (*Lac Plat*) the western extremity of Lake of the Woods and the terminus of navigation, to Red River. The distance to Fort

Garry is 91 miles. The character of the soil would not necessitate extensive works for a cart road, except near Shoal Lake.

2nd. *Southern Tributary.* The only tributary to Lake Winnipeg from the south is Red River, of which several of the sources are close to those of the Mississippi.

Red River, on whose banks is the colony of the same name, is in many respects a very pretty river. Its water, however, is far from being clear; it flows over a bed of clay that often makes it even muddy. Several brackish sources impart a disagreeable taste to its water; its color is in striking contrast with its name. It is said that its name is derived from a bloody combat, between Indians, that took place on the borders of Red Lake, hence the name of the lake, which, being one of the principal tributaries of the river, gave the latter its name. This river, which is now known by the same name from its most distant source to its mouth, was formerly divided into three portions. The upper section from its source to the Grand Forks, an affluent from Red Lake, was called Sioux River, while the Red River of that time extended only from Red Lake to the Fork—the confluence of the Assiniboine River. The Assiniboine, on the other hand, preserved its name from its junction with Red River to Lake Winnipeg. The greatest length of Red River along a straight line following its general direction, is about 400 miles. The windings of its channel give it a length nearly twice that of the straight line. There is only about one-fourth of the river in the Northern Department, that is from near the confluence of Pembina River to its mouth, a distance of about 100 miles by land. The windings are less numerous and not so marked in this section. The average breadth is from 150 to 200 yards. It is difficult to determine its depth, as it varies from 2 to 30 feet, according to the season of the year.

A steamer has plied on Red River since 1859. The eight years' experience thus gained enables us to form a more accurate idea as regards its navigableness, than is to be derived from the necessarily superficial observations or investigations made in a sparsely populated country.

The first steamboat that was placed on Red River was THE ANSON NORTHUP, brought by its proprietors at great expense from St. Peter's River, advantage having been taken of spring floods. The boat arrived unexpectedly in the centre of the colony in the beginning of June, no one anticipating its coming. Its arrival was treated

as quite an event, and, to the surprise of the public, cannon thundered and bells pealed forth chimes to signal rejoicing. The puffing of steam moving about on our river, told the echoes of the desert that a new era for our country was being inaugurated. Each turn of the engine appeared to bring us nearer by so much to the civilized world. Herds of domestic animals unaccustomed to the noise took flight, thinking, I suppose, that they were being pursued by a larger animal than themselves, and men of great as well as small minds, rushed in a crowd to see the new arrival which, however, was not a *chef-d'œuvre*. Children gave expression to their astonishment by declaring that they had seen an enormous barge, with a windmill on its stern, passing by.

The arrival of THE ANSON NORTHUP, as a matter of fact, inaugurated a new era for the trade of Red River colony. The Honorable Hudson's Bay Company determined to try the river for some of their business. They procured a license to trade amongst the United States Indians, and acquired a considerable extent of land opposite the mouth of the River *au Bœuf*, 200 miles away from Fort Garry. At this place, where they thought the steamers could generally reach, they commenced an establishment, to which they gave the name "Georgetown," in honor of Sir George Simpson, then Governor of Rupert's land, and who had warmly supported the new enterprise. Messrs. Burbank & Co., of St. Paul, established a stage line between Georgetown and St. Paul. In short, all was done that could have been done to launch us into civilized existence, such, at least, as is involved in the use of steam, or, failing it, of well harnessed horses.

In the spring of 1860 everything answered the general expectations; the river was high, the steamer began its trips and continued them throughout the summer. In autumn low water created difficulties, and there was difficult steering between the boulders of the *Outardes* rapids, which were now being regarded as a serious obstruction, at all events at this season.

In 1861 the Red River overflowed its banks throughout its course. A steamer is not endangered by water, on the contrary water is one of the elements of its power; so that our little boat was able to run with the greatest ease between Georgetown and Fort Garry, and this up to the end of October. Thanks to it and to Mr. Burbank's coaches we were able this year to go from St. Boniface to Montreal in twelve days.

The success of this year naturally encouraged the proprietors of the little steamer which was loser by its triumph; it was now thought too small, too clumsy and not sufficiently fashionable for the magnificent Red River! In short, it was decided to discard it.

The splendid INTERNATIONAL with its pretentious motto, "*Germinaverunt speciosa deserti*," came out of the Georgetown timber yards, at a cost of $20,000, and was launched in the spring of 1862. Circumstances favored it to some extent. The excitement created by the discovery of gold mines at Cariboo, struck the hearts of many with *yellow fever*, and the sufferers hoped to allay the symptoms most easily, by going to Fraser River across country. One hundred and fifty miners went from Georgetown in the INTERNATIONAL, on her first trip. Her success was not so great as was expected; she took six days to reach Fort Garry. Nevertheless, the INTERNATIONAL continued plying during nearly all summer. About autumn there was not sufficient water for her to ascend the *Outardes* Rapids; she was even obliged to lie up for the winter sooner than those interested in her desired. This was the beginning of the series of checks that steam navigation experienced during four years on Red River. In 1863 the steamboat having been taken to Abercrombie was unable to move, not alone on account of the Sioux, whom there was good reason to distrust after the massacre they had committed in the preceding autumn, but, also, because the water was too low to keep her afloat, although she drew only four feet. In 1864 she made only one trip in spring and again the return voyage was made with difficulty. In 1865 a similar result, a single voyage, and that only possible just after the breaking up of the ice. In 1866 the INTERNATIONAL did not cast loose from the large oak to which she is usually made fast at Georgetown. On the melting of the ice it was possible to have made a trip, but the failure of the preceding years lessened confidence to such an extent that now there had been no attempt made to collect freight. In 1867 the river was higher; the steamer, which made only two trips, might have continued to ply up to the end of August. Freight being again short at Georgetown, the steamer was worked on the lower part of the river between the two Forts Garry. Such has been the experience of eight years; the steamer could not ply during half the time, and during the other half she was a complete failure. The result has slightly disappointed bright

hopes and money-making schemes. Now the idea of a steamer on Red River does not cause the enthusiasm which it excited at first. Wealthy people and merchants, taught by experience and disappointment, fear uncertainty. Poor people are decidedly against steam navigation for the following three reasons:

1st. Red River abounds in fish and supports a great number of the necessitous. It is well known that steamboats are not skilful in the art of pisciculture.

2nd. Wood is very scarce on the banks of Red River, yet it is very much wanted there, and the *fire canoes* make war against the fuel on the banks, as well as against the food swimming in the water.

3rd. Land carriage from the United States hither, is an abundant source of profit to the land owners of the colony, who thus employ their horses and oxen; but the running of the steamer deprives them of this advantage, and all the money paid for cartage from St. Cloud to Georgetown goes into American pockets.

Whatever may be said about these reasons and disadvantages, it is certain that steamers will continue to ply on Red River. If instead of building so large a boat as the INTERNATIONAL a very small one had been built, a more satisfactory result would certainly have been obtained.

Red River receives, amongst other affluents in the United States, Otter-tail River, and Red Lake River, which, flowing from two lakes in the midst of fine dense forests, may be very useful for the conveyance of timber.

Shayenne and Pembina Rivers are also important tributaries. The latter appears as if posted to watch the American frontier, where it describes a curve out of British territory, in which are its sources.

In the Northern Department, besides some useless affluents, Red River receives the waters of Reed Grass River (*Roseau*), Rat River and Stinking River (*Sale*), which—without offering all the advantages possessed by the tributaries mentioned above, have nevertheless rendered us great services, and will render us yet greater, although they are nearly dried up during the greater part of summer.

The banks of Red River are cliffs of clay, generally very high, yet they are overflowed, the water often rising 30 feet above its ordinary level.

The most important tributary of Red River is, unquestionably, the Assiniboine, which was formerly considered the main stream, and retained its name down to Lake Winnipeg. The Assiniboine is not navigable, although it is several hundreds of miles long. In spring, but only in spring, one can come down by it: and, in fact, people do descend it in canoes or very flat boats, which never return. I do not know that, as a rule, it is fit for any other kind of navigation.

Its course is excessively tortuous; at its lower part it flows, in a bed of clay, through a fertile valley; the upper part runs through a plain which is in many places sandy and arid.

In spring, the streams flowing from Dauphin Mountains can carry the wood we shall require, into the Assiniboine, when we shall have exhausted the supply, hitherto so useful to us, on its banks.

Rapid River flows through a fine country which will certainly be occupied at some future day.

The great affluent of the Assiniboine to the west is Calling River (*Qu'appelle*), a small stream running through a delightful valley, and of which the expansion forms eight lakes, where the best kind of white fish abounds. Were it more wooded, the valley of Calling River would be peculiarly well fitted for settlement.

Some one has suggested the idea of constructing a dam across the southern branch of the Saskatchewan, to force back, into the valley of Calling River, the volume of water which formerly flowed through it, and, by this means, to render the Assiniboine navigable. Without stopping to offer objections to an idea which appears to me to be quite impracticable, I venture to express my astonishment at a proposal conceived, partly at least, to benefit Red River Colony, but of which the immediate consequence would be the inundation and then the ruin of that very colony. Inundations are precisely the greatest obstacles that the colony finds in the way of improvement, and a plan is suggested which, amongst other disadvantages, would bring an additional volume of water into it, nearly equal to that it naturally receives and that it cannot confine. Evidently Calling River, instead of being a very small rivulet as it now is, was formerly a beautiful and grand stream, or a large lake, occupying the whole valley which is nearly 2 miles broad; but, that was at a time when the whole plain—through whose centre Red River and lower Assiniboine River now run—was the bottom of a lake.

This plain would again become a lake were much of the southern branch of the Saskatchewan turned into the Assiniboine.

From the south, Assiniboine River receives the water of Mouse River, which rises quite close to Missouri River. Pieces of lignite having been found on the banks of this river, led to its being supposed that there were coal fields in the neighborhood. More careful examinations have not justified the expectation.

It was in following up Mouse River for a part of its course, that the explorers of Red River also discovered the head of Missouri River, and thence they pushed their exploration to the Rocky Mountains before any civilized man had seen their western slopes, at least in that latitude.

Calling River and the Assiniboine drain the whole plain to the very bank, so to speak, of the southern branch of the Saskatchewan, while Mouse and Shayenne rivers receive all the waters flowing from the *Grand Coteau* of the Missouri.

Red River receives, besides the foregoing, all the streams on the east which do not flow into the Mississippi. It is not then surprising that the melted snow, unobstructed on these vast plains whence it flows towards Lake Winnipeg, is in too great quantity to be confined within the ordinary bed of the river, and this is so much more natural since the lake being still covered with a thick coating of ice, at the time when the snow melts, does not lend assistance in drawing off the great accumulation of water.

Our inundations are very different from those in a mountainous country. Here, on our nearly horizontal plains, a torrent does not suddenly rush upon us with noise and rapidity ; but the rising of the water is rapid at the outset, then for several days very gradual, afterwards almost imperceptible, and finally it remains stationary for a few days. Its fall in like manner takes place gradually.

3rd. *Tributaries from the west.*—The western shore of Lake Winnipeg opens its limestone border to receive two tributaries worthy of the liveliest interest, and that absorb our attention on this side, to the exclusion of a great number of small streams also flowing into the great lake. These two tributaries are Dauphin River, also called Little Saskatchewan River, and the justly celebrated Great Saskatchewan River.

Dauphin River loses by want of depth : its stream is so beautiful and so rapid ! Besides discharging all the lakes which, I believe,

were formerly in the same basin with Lakes Manitobah and Winepegoos, this river is the outlet for the last two.

Dauphin River, which is but a few miles in length, flows out of St. Martin's Lake, which is 30 miles long and receives the waters of Manitobah Lake, through Partridge-crop River and Lake *Falle-à-la Perdrix*.

The word *Manitobah* is a corruption of *Manitowapaw*, signifying *Straits of Manitou*, or extraordinary—supernatural straits. Indians attribute the agitation of the water here, to the presence of a spirit. The Lake Manitobah has an area of about 1,900 square miles, a length of 120 miles, and a varying breadth nowhere exceeding 20 miles. Little White-mud River flows into this lake at its southern extremity. I mention the little stream, although of little importance in itself, because it runs through a small valley very well adapted for settlement, and there are now on its banks, as well as the shore of Manitobah lake, some establishments.

Water-hen River, which connects Lakes Manitobah and Winepegoos, decuples the distance which separates these two lakes, twice or thrice over, in its meandering course.

Lake Winepegoos (*Little Winnipeg*) has about the same area as its grand neighbor. Its length and breadth, too, are about the same. A rather curious phenomenon is to be remarked in these two lakes, where limestone abounds:—detached blocks of granite heaped together in reefs, project into the open and render navigation dangerous. It was on one of the reefs in Lake Winepegoos that the zealous Mr. Darveau, having stove in his canoe, lost his life. In some places flint reefs run parallel to the shore ; they become covered with soil and even trees ; they form strands or ridges which are often only a few feet in breadth, and on the land side are small lakes or marshes, occasionally of great extent, and which are very annoying to such as do not like to wet their feet on landing.

The pretty Lake Dauphin, about 20 miles long and 12 broad, discharges into Lake Manitobah ; and further to the north Shoal River (*rivière Plate*) discharges Swan Lake and River into the same lake ; and lastly, quite at the northern extremity of the lake, Red-deer River (*à la Biche*) one of the first discovered in the country, adds its contingent. The banks of the last river, as well as those of Swan River, being of considerable height, are naturally fitted for cultivation, and appear to be very fertile. Adding, to the

lakes and rivers mentioned above, a multitude of others scattered all over the country, it will be more readily believed that, at a no very remote period, the whole, including Lake Winnipeg, was one basin, or inland sea. Lake St Martin is only 25 feet above Lake Winnipeg; Lake Manitobah only 40 feet; Winepegoos 60 feet, and Lake Dauphin, the highest of the whole group, is only 70 feet. The last is at about the same level as the land in the centre of Red River colony, so that the levelling of the groups of lakes would involve the inundation of the country in which I am now living.

Lakes Manitobah and Winepegoos are magnificent sheets of water and navigable for vessels drawing ten feet. Unfortunately their connecting channel, as well as that which joins them to Lake Winnipeg, is not deep enough for large boats. This is the more to be regretted as, were it otherwise, these lakes would supply the most convenient route to the west where there are only four or five miles of the Saskatchewan valley to cross by land, and it would be an easy matter to make a canal through this strip, as the two lakes to be united are at nearly the same level, while, by this means, the twenty miles of obstruction to navigation, between Cedar Lake and Lake Winnipeg, could be avoided.

The mouth of Dauphin River or the Little Saskatchewan, the tributary second in importance on the western shore, is at the centre of the lake opposite to the mouth of Beren's River, which is second in importance on the eastern side. This kind of symmetry is also observable in the case of the most important tributaries.

The only affluent from the south is opposite to the only discharge stream at the northern extremity. River Winnipeg, the most important eastern tributary, is at the south-eastern point of the lake; and at the north-eastern point, the Saskatchewan—the great western stream—flows into the lake. We have now to consider the latter river.

The River Saskatchewan is of peculiar importance, as well from its great size as from the richness of the country through which it flows. Its name is an abbreviation of the *Cree* word *Kisiskatchewan* (*rapid stream*). Its principal sources are in the Rocky Mountains, which, and thanks to its windings, gives it a length of more than 1,200 miles. This great river divides into many branches that flow capriciously through the vast plain which they cut in various, and frequently quite opposite, directions.

The principal branch of the Saskatchewan is its northern one, called simply the Saskatchewan, and by our *voyageurs* Pas River (*rivière du Pas*). I said above that it rises in the Rocky Mountains; its source is a small lake near Mount Forbes, at about 51° 50 N. Lat. Winding amongst the mountains spurs near its source it follows a north-easterly direction to Pine Point (*Pointe aux Pins*) thence it runs nor'-nor'-easterly to the foot of Big Horn Hill, whence, having received the streamlet of this name, it hastens eastward to Mountain House. From this point to Fort Edmonton, its general direction is north-easterly; it continues in the same direction till it crosses the 54th parallel of latitude, along which it runs and then turns southward towards Fort Pitt, and thus, between the latter and Fort Edmonton, describes a large and almost regular curve. From Fort Pitt the river continues its south-easterly course to the *Elbow*, whence it turns suddenly towards the north-east, first reaching Carlton House and then Cumberland House. From the latter point its general course is south-easterly, although its great winding sometimes carries it towards the north, and sometimes towards the south.

From its source to Mountain House, about 150 miles, the river is quite unnavigable, although its breadth there is about 130 yards. Beds of coal begin to shew there—but interruptedly. All around is rather dense forest. Quite close to Mountain House there are small falls followed by rapids. Very near here, too, Clear-water River joins the main stream. From Mountain House to Edmonton, about 150 miles, is navigable with barges. This advantage, however, is not without some difficulties, as much from the rapidity of the current as from very low water at certain seasons of the year. So great has been the inconvenience from these causes, that men have preferred to leave their boats and cut a road through a partly wooded country. About midway between the two establishments the Saskatchewan receives Brazeau River, called also North Branch, (*Fourche Nord*) which has led to its being confounded with the main stream. A little lower down, White-earth River joins from a pretty lake which there was an effort to render celebrated by statements that there were very rich gold mines on its shores, as well as in the bed of the river.

At Edmonton House the river is 200 yards broad, and the valley in which it flows is 190 feet deep. A few miles below Edmonton

House is the mouth of Sturgeon Creek, which, flowing out of St Anne's Lake, crosses St Albert Lake and receives the waters of other lakes in the same group.

From Edmonton to Carlton House, about 500 miles by water, the Saskatchewan is navigable for steamers during six or eight weeks. Some years it may be navigable for a longer period; but the uncertainty and irregularity of the navigation, except from the middle of June to the end of July, makes it impossible to depend upon its being good for a longer period. When the river is low, its small rapids and shallows have not more than thirty-six inches of water. With every desire, then, to confirm the statements of those who talk loudly about the advantages of the Saskatchewan, it is impossible for me to regard 3 feet of water, winding over irregular and shifting banks, as sufficient for navigation of any importance.

At Carlton House the river is 480 yards broad. Between this point and the junction of the southern branch, about 50 or 60 miles from Carlton, there is a serious obstruction to navigation in Coal Rapids, extending for 20 miles; and even before reaching the rapids several places have to be passed that are shallower than the river above Carlton House. The stream in Coal Rapids moves at eight miles an hour, and is therefore a serious obstacle. In many places, boulders obstructing the passage from bank to bank would make the descent dangerous, even when the river is moderately high, and quite impossible when it is low, unless very great labor were to be expended in clearing it. The descent is safely practicable only when the river is very high, and then it would be impossible for steamers to return up stream on account of its rapidity.

From the Grand Forks (*la Fourche*) where the northern and southern branches of the Saskatchewan meet, to Fort *à la Corne*, there is no other difficulty to be contended with than the rapidity, 3 or 4 miles an hour, of the stream.

From Fort *à la Corne* to Cumberland House, about 175 miles, navigation is very uncertain; shallows and rapids are numerous; many places are not over two feet in depth when the river is low, and this occurs even in spring, when there has not been much snow in the preceding winter. The rise that takes place in June certainly makes the river deep enough for ordinary steamboats; but

then the current is so strong, that ordinary engines cannot overcome it.

Another difficulty at this part of the river is the rapidity with which the water falls after its summer rise; it goes down at the rate of 4 or 5 inches an hour. But few hours would be needed to reduce the level to such an extent as would stop a steamer in its trip; and should such a misfortune happen it might involve the complete wreck of the boat, as, were it impossible to remove the steamer from its dangerous position, it would be exposed to the breaking up of the ice in spring. The strength of the stream at this place would impart such force to the floating ice, that the boat could not withstand it. This fear, singular though it be, is the result of careful study and observation by a thoughtful engineer, whose report has supplied me with some of my information about the Saskatchewan.

From Cumberland House to the lower part of Cedar Lake, a distance of about 200 miles, the river is very well fitted for navigation. Between Cedar Lake and Lake Winnipeg, 20 miles, navigation of any importance is not to be thought of. Many rapids, amongst others *Demi-Charge du Rocher Rouge*, and particularly Grand Rapid, are insurmountable obstructions to ordinary navigation. The character of the geological formation presents a serious difficulty in the way of carrying out such works as would be required to render the stream passable; so that we must wait a long time before the Lower Saskatchewan will afford an easy and certain navigable route. The mouth of the river forms a safe and convenient harbor, capable of holding many boats.

However it may be as regards the difficulties which I thought it right to enumerate, the advantages are not to be lost sight of.

From the lower part of Cedar Lake to Edmonton, a distance of about 1,000 miles, for a period of six weeks, and that in the least favorable years, steam navigation would really meet with only one insurmountable obstruction, viz., Coal Rapids; or, if you will, from the mouth of the southern branch to Carlton. It has been suggested that this serious difficulty may be lessened by following the southern branch for about 60 miles, to a point where the road from Red River meets it, and then to proceed by land to Carlton, whence traffic might again pass by water as far as Edmonton.

This plan presents a route following two sections of the river—each section being about 500 miles long—a portage of about 22 miles between the two sections, and another portage of 20 miles to connect the navigable part of the river with Lake Winnipeg.

I have already given my opinion about the scarcity of wood on the banks of the Saskatchewan. The engineer's reports, to which I alluded, exactly corroborate the opinion I formed on the ground itself. From Cedar Lake to opposite Cumberland House, there is not enough firewood to supply even a small steamer, and this is an uninhabited country. From Carlton to Fort Pitt, 250 miles, the scarcity is almost as great. From Fort Pitt to Edmonton, and from the mouth of the southern branch to the Red River road, there is a few years' supply of aspen and white spruce. We again ask, what could a large population do in such a country?

A part of the Saskatchewan flows over a bed of clay, and its banks are also nearly everywhere clayey; so that it is not surprising to see its water strongly charged with insoluble matter, and never limpid. The mud and sand carried along by the stream are deposited in banks that are shifted and altered in all kinds of ways by the current, so as to deceive the most experienced pilot. The color of the water quite conceals these banks, sometimes formed only the day before, and creates another difficulty in the way of navigation.

The first large tributary of the Saskatchewan, in descending the stream, is Battle River. Its source is a group of lakes to the south of the Saskatchewan, at about the 53rd parallel of latitude, and opposite to the St. Anne group, which is at about the same distance to the north of the Saskatchewan. Battle River runs south to about the 52nd parallel of latitude opposite to the point where the Saskatchewan reaches the 54th parallel. It then goes northward to the 53rd parallel, and after again going slightly towards the south it pours its waters, which have flowed with difficulty along a course of 300 miles, into the Saskatchewan. Battle River runs in a deep and narrow valley through a rich country. It derives its name from the numerous fights that take place between Crees, Blackfeet and other Indians inhabiting the surrounding country, and who regard one another with inveterate hatred. The accidents of the ground there, present facilities for the bush-fighting of these cowardly and merciless skirmishers.

The southern branch of the Saskatchewan is, to the northern

branch, what the Missouri is to the Mississippi—a vassal more powerful, but less celebrated than his lord. The southern branch, which our *voyageurs* usually call *la Fourche des Gros Ventres*, has three main sources all flowing from the Rocky Mountains. The southernmost of these three retains the name *Gros Ventres*, given to it at a time when an Indian tribe so called, lived on its banks. The intermediate source is Bow River, which joins the preceding at about 112° W. long.; and lastly, the magnificent Red-deer River, which carries the waters of Buffalo or Bull Lake across an exceptionally picturesque country, and joins the souhern branch of the Saskatchewan at about 51° N. lat., 109° 31'W. long. These three large streams, thus united, form a grand river 300 or 400 yards broad, in some places deep, and very rapid everywhere. As the country through which it flows is sandy to within some distance from its mouth, its water is of course clearer than that of the northern branch.

The country through which the three feeders of the southern branch flow, is exclusively occupied by wandering tribes. There is not even a single trading post in that extensive region. At first, dread of Indians prevented an establishment being located there, then habit, and a hope that such small supply of furs as the country was capable of producing, might be drawn from it by other means. In 1822, the Honorable Hudson Bay Company, amalgamated with the North-west company during the preceding year, established a post at the junction of Red-deer River with the southern branch of the Saskatchewan. The establishment was called Chesterfield House. Officers selected from the staff of both companies—who, as well as being courageous, were experienced in dealing with Indians of this district in the course of the business they carried on at posts on the northern branch—were sent with one hundred men to this dangerous post. They held the place for only a few years, in the course of which several men were killed. This led to the abandonment of an experiment of which the dangers were not compensated by its trading advantages, as the mainteinance of the place involved an outlay which absorbed the profits.

Since then the Indians have become much gentler; a few have become Christians: dangers such as I have related no longer exist there; and one of our courageous missionaries has now selected a spot near Buffalo Lake where he meets the dreaded Blackfeet Indians, and teaches them, putting off the erection of a

permanent establishment that he may more effectively labor at the conversion of these feared children of the plains.

I am sorry I cannot describe the character of the southern branch of the Saskatchewan as regards navigation. I have not got such information on the subject as I can depend upon. The various expeditions that have crossed this country, certainly supply abundant and valuable information; but I am not aware that repeated observations have been made at various seasons and in different years, from which alone it would be possible to arrive at correct conclusions with regard to the fitness of these rivers for navigation. Much has been said about uninterrupted steam navigation on all the branches of the southern Saskatchewan and on Bow River, up to the Rocky Mountains; but as I know that these rivers are easily fordable at many places, I conclude that their navigation must be obstructed, at all events in a few places; yet, as the Mississippi has been navigable, and particularly from Lake Pepin to St Paul, it is evident that not much water is required to obtain a great result. Shifting sands render works of improvement all but impossible in the kind of rivers that flow from mountains across all but woodless plains, and, experiencing sudden rises and falls, move with much greater rapidity than do rivers having their sources in a flat country or flowing through wooded districts. This last circumstance, while creating a difficulty from the force of the current at the time of a rise, limits navigation, as the rivers which have overflowed become very shallow again in the course of a few days.

A tributary, which is celebrated in the history of this country, flows into the Saskatchewan from the north, by way of Pine Island Lake. Its name is Rapid River, in which we include the series of lakes and rivers draining the country to the south of Fort de Traite Portage. This portage, called by the English—Frog Portage, is 365 yards long, and connects the Rapid River waters with Churchill or English River. Frog Portage lies low, and when Churchill River is swollen it overflows along the portage, converting it into a rapid which a canoe may sometimes descend. An officer of the North-west Company was drowned in shooting this rapid.

The stream, leaving Frog Portage, presently enters the Lake of the Woods, then passes into Chetek or Pelican Lake and Half-moon Lake; flowing onwards, as Rapid River properly so called, it enters Beaver Lake, the southern limit of the Laurentian system at this

longitude; then the stream runs, sometimes with difficulty, over the never-ending limestone beds of Maligne River, in whose pools are found sturgeon, whence it is called Sturgeon River; thence passing through Pine Island Lake it flows into the Saskatchewan. It is very difficult to pass along this chain of lakes and rivers; even when swollen the stream is interrupted by thirteen portages and a great many rapids. When low our *voyageurs* dread, and with good reason too, the passage of Sturgeon River, where I have often been grieved in watching their painful labor.

It is, then, useless to think of other navigation on Rapid River than that primitive kind now practised on it.

Carrot on Root River and the Little Pas River, which has the honor of giving its name to the giant of the west and to the mission at its mouth, are also affluents of the Saskatchewan, running along its southern bank. A little below Pas, the northern bank opens to admit the waters of Moose Lake.

The upper part of the river, in particular, has many other affluents, which, to avoid tediousness, I have omitted to enumerate. Some of these small tributaries, however, have the advantage either of flowing from lakes well stocked with fish, or of being easily utilized as water power.

The coal fields which cross the different branches of the Saskatchewan are a great source of wealth, and favor the settlement of the valley in which nature has multiplied picturesque scenery that challenges comparison with the most remarkable of its kind in the world. I can understand the exclusive attachment of the children of the Saskatchewan for their native place. Having crossed the desert, and having come to so great a distance from civilized countries, which are occasionally supposed to have a monopoly of good things, one is surprised to find in the extreme west, so extensive and so beautiful a region. The Author of the universe has been pleased to spread out, by the side of the grand and wild beauties of the Rocky Mountains, the captivating pleasure grounds of the plains of the Saskatchewan.

4*th. North of Lake Winnipeg.* Lake Winnipeg has no affluent from the north, but towards this point, and to it alone, it bears the immense volume of water it receives from the tributaries, great and small, which crowd round it on all sides.

Lake Winnipeg discharges itself through a strait, or a wide, deep,

rapid and very short river, which flows into Great Play-green Lake. The latter, as if fearing the result of the aggression, divides its waters into two branches and dashes them against the bare rocks on its southern shore, confident that, by this double attack, it will deceive, and secure itself a passage over the thick bounding wall. Success crowns its first effort. These liquid battalions are familiar with such struggles; for it is not to be forgotten that of Pigeon River, Winnipeg River, Red River, the large and small Saskatchewans and a thousand other vassals who have sent their contingents, some, from their very birth, have fought in the midst of rocks, and others have, at all events, tried their strength in struggling over limestone beds. Uniting in Lake Winnipeg these streams could not fail to acquire greater power, and the vigor they display on separating at the extremity of Play-green Lake is not to be wondered at. After the victory gained over the first obstruction they unite again in Cross Lake, as if to wait for the effect of their first effort. They appear to catch the roaring of a world of lakes checked by the heights they have just disturbed. The uproar inspirits them, and, again sounding the charge, with a shout they rush down the rapids and plough them up as they tear along. And now, drawing breath in another lake, they are joined by reinforcements coming, by Hay River, from Reed and other lakes, and decide upon leaving the 53rd parallel and proceeding by the northwest to gain the intersection of the 5th parallel with the 90th meridian, having thus far advanced by Katchewan River on one flank, and on the other by the first section of Nelson River. The two branches re-uniting in Split Lake are there joined by Burnt-wood River, increased by additions from many lakes. This volume of water, pouring out the grand and impetuous Nelson River, flows eastward to Hudson's Bay, receiving in its course the pretty *Pierre-à-chaux* River that also drains several lakes.

Nelson River is one of the mightiest that I know. It alone drains the whole of Winnipeg Basin, that enormous plain whose boundary passing along the watershed of the St. Lawrence then follows those of the Mississippi and the Missouri and turns back from the Rocky Mountains, at first along the watershed of the Arctic Basin and then along that of the intermediate Basin.

Nelson River, in the variety and number of its falls and rapids, presents grand scenes. This may easily be imagined, as its great

volume of water flows over the chain of Laurentides, which, while they have certainly lost some of their elevation, yet preserve sufficient to infinitely diversify the views on one of the largest rivers in the world, that boldly crosses them.

The navigation of Nelson River is all but impossible ; yet, it has been frequently ascended and descended.

Many attempts have been made to maintain trading posts on the lakes discharging into Nelson River, as the country is naturally very well suited for hunting and fishing ; but in the end, the difficulties of navigation have been found to be so great, that the Honorable Hudson's Bay Campany have now only one post on the whole of this stream and its affluents. The post is Norway House, whence are brought the goods taken there, with so much labor, from York, by the Hayes River route, which imposes on the unfortunate packages, and on the still more unfortunate *voyageurs* who carry them, a journey thrice as long as would be necessary were Nelson River easier of ascent. From an economic point of view this majestic stream is useless, and therefore, saying nothing more about it, I shall leave it to roar on its impetuous course.

Fearful of the dangers to which those who descend Nelson River are exposed, let us return by another route to Play-green Lake, where it debouches. We shall first say a word about the narrow tongue of land that separates this little lake from Lake Winnipeg.

It is called Mossy Point, and, in fact, thick beds of moss and vegetable matter cover a great part of the tongue. These deposits are, in some places, several yards deep, and were probably heaped there by the currents prevailing in the north of Lake Winnipeg and the northern winds meeting these currents. Besides the waters of Lake Winnipeg, Play-green Lake also receives the River *aux Brochets*, which gives its name to the depôt a short way from its mouth, and which the English always call *Norway House*. These two names applied to one establishment cause it to be supposed, sometimes, that the route towards the north or to the Hudson's Bay is by the River *aux Brochets* (Jack River) ; while that river, instead of flowing from the north-east, comes rather from the south-east, its source being a lake of the same name. Not finding, here, the route which we would follow to York Factory in company with regular travellers, let us turn to Sea River, which is but the commencement of Nelson River. Let us advance with care so as to

avoid following the dangerous route we wish to shun ; let us see if there be no other channel. Here is Black River, a mere streamlet into which the *voyageurs* launch their boats, hauling them over three beaver dams that alone render this route practicable. The ingenious architects of these dams were protected for several years by a grateful law, and gaining confidence they were in the habit of fearlessly approaching the *voyageurs*. With vile ingratitude and thoughtless improvidence these very *voyageurs* broke the protecting law and destroyed the peaceful families of the laborers. Since then, men have had to do the beavers work, and have acquitted themselves but poorly in repairing the dams.

The source of Black River is just at the foot of the height of lands, formed by the chain of Laurentides, that the great Nelson River does not fear to attack, and proudly vanquishes near by.

From the height of lands (*Portage de la Roche peinturée*) the route descends to York, at first along a small river without a name, then along *lac du Milieu*, River *au Couteau*, Knee Lake, Jack River, Logan Lake, Hill River, Steel River, and lastly Hayes River. This series of rivers and lakes forms an uninterrupted water course, but it is an extremely difficult one to navigate, as it has no less than thirty-four portages in a distance not much over 300 miles.

What the position of Red River colony, and of the whole Northern Department, was when this was the only route of communication may be imagined. All who came into the country, or left it, had to experience transhipment thirty-four times in this short journey, while the shoulders of the *voyageurs* were the only available vehicles in the portages, of which many were of considerable length. Twenty to thirty days were required to return up this water course with large canoes, and this with *voyageurs* whose strength and agility enable them to undertake greater labor than any other men. The same route is still followed in going to and returning from York Factory ; but the greater part of the trade of the country passes through St Paul in Minnesota.

York harbor, called also Port Nelson, is at the mouth of Hayes River. The harbor can shelter only two ships, and is only five fathoms deep. It is in reality only an inlet, sheltered on the south by the main land, and on the north by a sand bank or tongue separating the mouths of Hayes and Nelson rivers, and thrown up by these two large streams which press on either side of it. The little

harbor is perfectly sheltered at low water, for then the sand bank is quite uncovered and it looks like an artificial pier. High water overflows it, but does not entirely do away with its sheltering power. The harbor is open only during the months of August and September, and visited only by the Honorable Hudson's Bay Company's ships, of which one or two go there annually. The anchorage is several miles away from the factory, whither goods are brought from ships in the roadstead, by a small schooner kept in the harbor, and which is also employed between the factory and Fort Churchill.

The River Severn, used as a means of communication between the two posts on its banks, is rather a fine river. Its navigation is difficult. It flows into Hudson's Bay to the east of Port Nelson. The height of land from which Beren's River, previously alluded to, flows, is reached by following Severn River and the lakes connected with it. Bark canoes sometimes take this route in passing from Lake Winnipeg to Hudson's Bay.

III. INTERMEDIATE BASIN.

Under this head I include the country between the heights sending their drainage into the Arctic Ocean and those sending their drainage into Lake Winnipeg. This intermediate basin, like the Winnipeg basin, discharges itself entirely into Hudson's Bay, and has only one large artery with which are connected all the veins that circulate the aqueous life of the country. There are a few exceptional streams, of no importance, that flow directly into Hudson's Bay. The great artery to which I allude is English River, called also Churchill River. The Crees refer to it as the *Missiwipi* (*much water*), and by the Chippeways it is known as *Janes Deznedhe* (*great river*). As we remarked, when speaking of Mackenzie River, Churchill River has two of its sources in common with two important tributaries of *the* river of the north. These sources are, first, Island Lake, which, while feeding Clear-water river, also supplies Churchill River through Rock and Egg Lakes. The second common source is Wollaston Lake, a portion of which flows towards Athabaska Lake and some towards Deer Lake, which faithfully conveys it to Churchill River. This phenomenon, occurring twice in the connection of Mackenzie and Churchill, is repeated between Churchill and

Saskatchewan rivers, for Long Lake supplies water to both Beaver and White rivers, the latter being an affluent of the Saskatchewan. In short this intermediate basin has sources in common with the two great basins I have already described.

The mouth of Churchill River forms the port of the same name on the Hudson's Bay coast. This harbor, celebrated in days gone by, is capacious, safe and convenient. The little schooner which sails between Churchill and York Factory, still makes use of it; and here, too, are sheltered such Hudson's Bay Company's ships from England as are accidentally obliged to winter in these parts.

The windings of Churchill River make its course as long as that of the Saskatchewan; and its volume of water is at least as great, but is very different as regards navigation. From *Primeau* Lake to its mouth, the river flows almost the whole way amongst rocks. These it appears to hollow out into couches; but finding them uncomfortable, it bounds about violently and irregularly. The rocks, enraged by its audacity, draw back and uncover yawning gulfs, and into these it wildly rushes. Between its numerous cascades the river becomes calm, and takes the form of chains of lakes that are often very beautiful.

After this general view of the entire stream, let me now enumerate its different parts, such of them, at least, as are used as routes of communication. Let us return to its most remote source, that is, to the head of the Beaver River, to which I referred a short time ago. This small stream, formerly used by the North-west Company as a canoe route *viâ lac la Biche* to Lesser Slave Lake, is separated from *lac la Biche* by a portage of only two miles in length. From this first source to *l'Île à la Crosse* Lake, Beaver River is navigable, at all events when swollen, for bark canoes. I came down it in this manner without any difficulty, rowing freely throughout a whole week. Were this river always thus full, it would be very advantageous, as it passes through a country which is generally fit for settlement. Unfortunately the supply of water, which depends upon the Almighty, does not take account of the desires of weak mortals, and Beaver River, deeper than Green Lake, at any rate throughout two-thirds of its course, is frequently very ill suited for navigation, even in bark canoes. If I recollect the ease with which I descended it, I certainly cannot forget the difficulty I had in ascending it.

The plain over which Beaver River runs is quite covered with

magnificent lakes in which fish abound. The ramifications of the river near its source, connect a number of these lakes together. Then, amongst its affluents is North River, a route sometimes followed to Pike Lake, and thence to Pembina and on to the Athabaska. The magnificent *lac Froid*, which receives the waters of *lac des Outardes*, begins a series of lakes. Front Lake, *lac du Detroit*, and Water-hen Lake, which, with the river of the last name, make a route, parallel to Beaver River, often followed in passing between *l'Ile à la Cross* and *lac la Biche*. The southern bank, after an elbow, becomes the eastern, where also, there are many very remarkable lakes. Amongst them may be noticed Moose Lake, Green Lake, Assiniboine Lake, also those called Traines, Doré and Plunge; and a great many more of less importance, of which I shall spare the reader an enumeration.

Beaver River discharges into *l'Ile à la Crosse* Lake, one of the principal links in the chain of lakes called *Churchill River*. Let us now ascend to other sources of this river.

I have said that this stream has one of its sources in common with Little Athabaska or Clear-water River—the source is Island Lake, fed by streams flowing from the *Montagnais* country. The lake, after parting with some of its waters to Clear-water River, discharges the remainder into *lac des Roches*, which flows into Clear Lake, and this discharges into Churchill River.

The head of Churchill River is generally considered to be Methy Lake. This lake discharges into a river of the same name, on which *vogageurs* have to make three portages. On leaving Methy Lake one enters Buffalo Lake, about 40 miles long and fed by Buffalo River. Buffalo Lake is connected by Buffalo Straits with Clear Lake (*Lac des Œufs*) to which I have already twice referred. Deep River (*Rivière Creuse*) flows from Clear Lake, in a south-easterly direction, into *l'Ile à la Crosse* Lake, where it meets Beaver River.

The Lake of *l'Ile à la Crosse*, about 60 miles long, collects the various sources of Churchill River. It discharges through *Puise* River, in which there are five rapids (*Crooked Rapids*,) into Primeau Lake, having previously been joined by Deer Lake—the outflow of Cree Lake.

Violently tossed about by *Croche Milieu* and Knee Rapids, the stream seeks repose in Knee Lake; flowing thence, it forms Hay

River (*rivière aux Foins*) and receives Pine River. These two streams flow on together peacefully and as if to strengthen their friendship, for their waters have, in part, come from one place. Another widening in the river spreads them out into Sandy Lake; *nolens volens*, they have then to shoot Serpent Rapid, to cross Serpent Lake, and then Mouse Lake. The large and difficult Pine, Birch and Broken Canoe (*Canot tourné*) Rapids, shoot the stream into Black-bear Island Lake (*l'Huile d'Ours*) whence it passes over Thicket Portage (*Cascade de Harrier* or *Portage des Haliers*) into Trout Lake. The beautiful Trout, Steep Bank (*des Equors*) and Big-rock Rapids, carry it into Devil's Lake, and then follow four exceptionally difficult rapids of the same name, which former *voyageurs* were unfortunately too apt to apply to whatever stood in their way; so true is it that forgetfulness of God necessarily involves slavery to the demon.

On escaping from Satan's empire, Churchill River reposes for an instant in a very small lake, whence, descending the extremely beautiful Otter Rapid, it flows majestically into the lake of the same name.

The two hills and the cacsades beyond them, lead to the mouth of Rapid River, an affluent from Laronge and other lakes grouped with it, which flow through Hare Lake. The view of the two hills prepares one for the grand scene presented by the cataract of Rapid River rushing down a height of one hundred feet. This turbulent stream assumes a certain degree of calmness as it flows into Churchill River, but after a momentary pause it again rushes wildly, in a succession of rapids and cascades, to Frog House, near which is the Frog Portage previously alluded to.

The part of Churchill River which I have just described, from 300 to 400 miles long, is only navigable with the canoes in use. It is impossible to utilize the route otherwise. The rapids I have enumerated, present serious obstructions; many are very dangerous, and involve as many as twenty portages.

From the southern extremity of *l'Ile à la Crosse* Lake to the mouth of Methy River, a distance of about 120 miles, there is no obstruction to navigation; but a long time must elapse before the country shall be so changed that more convenient boats shall replace the canoes and barges now used there.

A little below Frog Portage, the mouth of a second Deer River

is seen; this one flows from the large Deer Lake. This sheet of water is one of the largest in America, its length is not less than from 150 to 200 miles. Completely surrounded by crystalline rock the lake is extremely deep and its water remarkably clear. Deer Lake receives the waters of Jack Lake (*des Brochets*) which in its turn is indebted to Wollaston Lake, the same that we alluded to as feeding the eastern tributary of the great Athabaska Lake.

I shall not undertake to describe the part of Churchill River between Deer River and Hudson's Bay into which it flows. I have never seen that portion of the river, and I have never met a single individual who had visited it; yet, formerly, that part was frequented, for the Hudson's Bay Company penetrated their domains by that route, as well as by Nelson River. The extreme difficulty experienced in ascending, and even in descending, these two rivers, has led to both routes being abandoned, and lower Churchill River is no longer navigated with the Company's boats.

The violence of the rapids throughout this great stream is explained by the fact that it, too, flows over the chain of Laurentides.

The upper part of Churchill River, which is beyond the chain, is not so impetuous as it becomes immediately afterwards.

Besides the great river, there are other streams in the intermediate Basin which flow into Hudson's Bay, such as Seal River and others of which I know only the names, and about which I cannot give the least information.

The whole of the intermediate Basin is emphatically the region of lakes; they are there in profusion.

CHAPTER III.

POLITICAL CONDITION.

The Northern Department has three distinct political divisions, known as the North-west Territory, Rupert's Land, and Red River Settlement. Let us consider these separately:

I. THE NORTH-WEST TERRITORY.

The first political division, which we have already referred to as "the Arctic Basin," includes all the country watered by the streams flowing into the Arctic Ocean. It comprises the space enclosed in the angle formed by the Rocky Mountains, and the height of lands winding from Mount Hooker to the northern extremity of Melville Peninsula.

The first to explore the North-west Territory, I believe, was Samuel Hearne, who, in 1769, penetrated into the interior, from Churchill, as far as Copper-mine River. The remainder of the country was almost entirely discovered by employés of the North-west Company. This Company was formed in Canada, in 1783, with a view to monopolize or to consolidate the interests of those who, since the conquest of la Nouvelle France by England, carried on the peltry trade in the Indian country. The title which the Company adopted does not appear to me to indicate a right to the possession of the Territory, which I include under the same name. The Company assumed this particular title only because, on leaving Canada, it moved towards the north-west of the continent; or to follow up the idea which had always possessed travellers taking that route. The idea was to discover a passage by the north, or by the west, to the Pacific Ocean. The geographical position—in British America—of the region of which I speak, naturally originated its name.

There remains but the name. The Company of the North-west

has ceased to exist. On amalgamating itself with the Hudson's Bay Company there was no question of special title to proprietary right in the Territory, nor to any right or privilege of the kind.

In 1821, when the two rival companies—ruined by their rivalry—joined their interests, the English Government gave them, under the title of "Hudson's Bay Company," a license or exclusive privilege to carry on the peltry trade amongst the Indians living to the west of Rupert's Land. This monopoly was granted for 21 years. Before the expiration of the term—1838—the license was renewed for another period of 21 years, that is, until 1859.

Since that date the monopoly has not been exercised as of right, so that now the Honorable Hudson's Bay Company, who still occupy the North-west Territory, have no exclusive privilege there, nor do they pretend to any. Competitors are free: some entering by Lac la Biche in the south-west: others, having crossed the Rocky Mountains, come from the west by Peace River. Competition has not, hitherto, injured the trade of the Company. The remoteness of these regions, the difficulty in reaching them, and of maintaining one's self when there, and the enormous expense of transport, cannot but defeat ordinary ambition, and ruin private enterprise. Moreover, the influence which the Honorable Hudson's Bay Company has acquired over the Indians of the Territory, and the facilities offered by their numerous posts, which afford one another mutual support, combine to render competition difficult—so difficult, that all competitors withdrew last year, and the Company is now alone in the field.

The political condition of this part of the British Dominion is very remarkable. The Home Government entirely disregard it; no established colony does or can exercise any authority in it; nobody in it has any rights or privileges; and the country is without law, without government, without administration, and without civil or legal jurisdiction.

Who is to improve the political condition of this country? Will England do it, or will Canada? Will the United States decide to obtain possession of it, simply because it presents the easiest route by which they may reach their American Russia? These are questions which naturally suggest themselves, and to which the answers are locked in the secret recesses of the future. For my part, as there are extremely great difficulties in the way of colo-

nizing the few points of this vast Territory capable of cultivation, I acknowledge frankly that I would as soon—perhaps preferably—see the country remain as it is, as see it change, if the changes are to be such, as it appears to me, they would inevitably be.

II. RUPERT'S LAND.

This is the name of the Honorable Hudson's Bay Company's possessions, that is to say, of all the country watered by streams flowing into Hudson's Bay, and its extension, James' Bay.

In speaking of the Northern Department, we use the name Rupert's Land to designate only a part of the great whole to which it belongs; to indicate all of our Territory whose drainage flows into the great bay.

The political condition of this division of the Northern Department is very different from that of the preceding one.

This country is under a Company whose title is incontestible, at least as regards a portion of this vast territory; and, according to some learned lawyers, the Company has a good title to the possession of all. We shall not undertake to discuss the arguments for and against the proprietorship, but, having pointed out the most plausible objection, we shall content ourselves by also pointing out the titles and privileges of the Company.

The strongest argument against the rights of the Honorable Hudson's Bay Company is the previous possession of the Territory by France. Forty-four years before the grant made by Charles II. of England to his cousin Prince Rupert, and his companions in adventure, a charter granted by Louis XIII., in 1626, gave the district of Hudson's Bay to La Compagnie de la Nouvelle France. It is said that the treaty of Ryswick, in 1696, admits that the whole of Hudson's Bay belonged to France.

By the treaty of Utrecht, the coast of Hudson's Bay was ceded to England in 1713, and it was not until then that she acquired a good title in these parts: moreover, care was taken to insert clauses, in the treaty, to insure protection to the "Compagnie de la Nouvelle France," which had previously been put in possession of the country by the authority of the charter granted by Louis XIII.

Although the boundaries of the French and English possessions, between the signing of the treaty of Utrecht and 1763, are not well defined, nevertheless the English—even those least favorable to

French pretentions—acknowledge that Red River and the Saskatchewan were in Nouvelle France, and that, with the other French Canadian territory, it was this district which was ceded to England by the treaty of Paris.

Now, by the treaty of Paris, the French Canadians were guaranteed their rights and privileges, and received a promise "that they should not be subjected to other imposts than those established under the French Government"—("De n'être pas soumis a d'autres impôts que ceux établis sous la domination Française.")

The Hudson's Bay Company have, therefore, no exclusive right or privilege in the Red River valley, nor in the valley of the Saskatchewan, and its title to a part of the country to the north of these valleys is doubtful.

The foregoing is the objection, of which I shall discuss neither the value nor the bearing: I merely state the case, and, following the example of many others who understood it as well as, and even better than I do, who, moreover, were competent judges in the conflict of pretensions and opinions, and who, notwithstanding, have never made the least attempt to deprive the Honorable Hudson's Bay Company of their rights and privileges,—I shall be silent as regards this doubtful point. This significant waiver, supposing its support necessary, in effect, leaves the Hudson's Bay Company mistress in the country within the limits assigned by its charter.

The charter, we said above, was granted by Charles II. of England to his cousin—Prince Rupert, under whose patronage was formed a company of merchants and explorers (*aventuriers*) who hoped, too, to find a north-west passage to the western seas. This association—in the words of the charter—is described under the title of "The Governor and Company of Adventurers from England, trading in Hudson's Bay," and known by the title "The Honorable Hudson's Bay Company." The full and entire possession of the territory described in the charter, is assigned by it to this Company. Hunting, fishing and the exclusive right to deal in furs are also the Company's privilege. The Company has, moreover, absolute jurisdiction over the inhabitants of the country. In effect, the Company is declared to be mistress of the whole country and all appertaining to it.

Such is the political condition of Rupert's Land. Such, at least,

is its condition as created by the charter to which the Imperial Government has ascribed the weight of a valid title.

I do not know that the Company has ever asserted its exclusive right to hunt and fish, but up to 1848 it insisted on its claim to the trading monopoly. The claim has been abandoned since that date, and, in fact, from that time there has been perfect freedom in trading here. The ruling influence of the Company in Rupert's Land is not attributable to its rights and privileges but to the resources of its organization. All the world is free to go and to come, to hunt and to deal in furs. Excepting the difficulties to be met with in traveling, there is no country under the sun in which greater freedom is enjoyed, and this, notwithstanding the impression spread abroad that the Company holds the country in a half enslaved state. The Company, nevertheless, still retains its titles and exercises civil authority. This state of things ought to be considered when enquiring into the policy to be adopted with reference to this country, and when speaking of the changes to be made in it. These changes are working themselves out—What are they to be? The United States—which fancy they have a right to whatever suits them—look upon it as natural that they should come and take possession of this country. The new confederation of British Provinces does not lose sight of us. What is England going to do? What part will the Company play? A few years, I suppose, will solve this problem, which I do not propose to examine.

III. RED RIVER SETTLEMENT.

We have just treated of two great divisions of the Northern Department; there remains a third to be noticed, in the centre of which I write these lines.

A Scotch noble—whose position in the Honorable Hudson's Bay Company gave him great influence—conceived the project of establishing a small colony in the heart of Rupert's Land. With this object he obtained a grant of a certain extent of land on the banks of the Red River and the Assiniboine, and there began the settlement which still retains his name—"Selkirk Settlement."

This oasis in the desert, where the *voyageur* and the trader may seek rest in the decline of life, is better known by the name of "Red River Settlement" or "Assiniboia."

The Settlement, founded in 1812, experienced many difficulties, which frequently exposed it to complete ruin. It survived, however, all these destructive shocks; but, its founder was not to see its growth.

The Hudson's Bay Company bought back, from Lord Selkirk's heirs, the lands which it had sold to his Lordship: and now it is the Company which governs the little colony.

Assiniboia is very circumscribed, inasmuch as its boundary is described with a radius of only 60 miles, about a point at the confluence of the Assiniboine and Red Rivers. The colony has then the advantage of extending all round the compass. We are enclosed in a circle,—but it would be unjust to consider us in a "cercle vicieux." *

Although under the Honorable Hudson's Bay Company, the Red River Settlement has a distinct political existence; time has developed a constitution for it, which, in theory, is the same as in the days of the Company's monopoly, but in practice is now very different. The affairs of the Settlement are managed by a governor, who is not always the governor of Rupert's Land—who has not even been invariably a member of the Company. The Hon. Judge F. Johnson was once governor here: Colonel Coldwell, who was governor before him, was not only not a member of the Company, but was appointed by the Crown.

To assist the Governor of Assiniboia, there is a council of an indefinite number of members. These members are also nominated by the Honorable Hudson's Bay Company, but justice requires that we should say that—without introducing the principle of public election—the Company during the past twelve years, at any rate within my personal knowledge, has been guided, in its selection of councillors, rather by the public voice than by its own interests, at least its mercantile interests. It has selected several councillors from amongst those who have been most warmly opposed to its trading. It is true that on two occasions it refused to appoint citizens who presented numerously-signed petitions in their favor; but it must be remembered—and I have official proof of the fact—that these gentlemen, anticipating a refusal which otherwise they would not have experienced, publicly loaded the Company and the council

* "Cercle vicieux"—in "logic" a circle out of which there is no escape.—D.C.

of the colony with so much gratuitous abuse, that their appointment became an impossibility, as much for the sake of the honor of the Company itself as for the honor of the council, of which many members would have resigned had men thus disposed been forced upon them as colleagues. However, the Executive Council—which is also legislative—is not chosen by suffrage. It is composed of various elements selected from people of fair intelligence amongst the different classes of society in the colony.

If the selection of councillors does not meet with universal approval, it is, I think, at all events, as good as could be expected were it entrusted to others than the Company. Although I am myself a member of council, conscientious conviction obliges me to declare that it conducts public business most faithfully. The governor does not exercise any influence over it other than that which is lawful and reasonable, and limited by the interests of the members, of whom only one belongs to the Company.

Law is administered by a chief judge called "Recorder," assisted by justices of the peace, cuncillors are justices, *ex officio*. This tribunal is our Supreme Court and sits quarterly. In addition, small courts to enquire into civil causes of secondary importance sit monthly in the central district, and bi-monthly in all the others.

A justice of the peace assisted by several magistrates presides in these Courts. The magistrates are appointed by the Colonial Council.

The Governor and Recorder, the only officers whose salaries are of importance, are paid by the Company. The salaries of the other officers are so small as to be drawn from the Colonial Treasury. This treasury is not the main resource of the Company—far from it.

The public revenue is derived from an import duty of 4 p. cent. on the cost price of articles. Many articles—amongst others, agricultural implements—are not subjected to this charge. Licenses and fines are the other sources of revenue. The Company is on the same footing as individuals with reference to import duties.

The public accounts of the colony of Assiniboia have an advantage which many governments—even elective ones—might envy, they always show an excess of receipts. The councillors, not being elected by the people, dare not tax them, much less draw large salaries from them.

The little settlement has a population of about 10,000, speaking French, English, Gaelic, Saulteux, Cree, &c.

Separated from the rest of the world for so long a time, they now see communication becoming easier, and civilization with its advantages,—alas! perhaps too, its disadvantages,—threatening destruction to their perfect liberty,—a liberty, often, it may be, indolent; but certainly more virtuous and fair dealing than its detractors think or allow.

Such, in few words, and without wearying detail, is the political condition of the Red River Settlement. Offspring of Rupert's Land, it will follow its mother and be ruled by the influences which affect her. Yet, although not quite free, the child has acquired certain rights; it possesses or occupies lands for which it has not always paid: it has cultivated them with its labor. True,—the labor has not always been great; but we speak of a child of the desert. It commands indulgence; it presumes to hope that here the foreigner shall not be preferred, that in the great and wise plans matured by the Mother Country and Canada—its eldest brother, its past history may not be entirely disregarded.

In the colony itself there is nervousness and uneasiness about the future. Some who hope to gain by any change are clamorous for one; others, dwelling more upon the system of government than upon its application, would like to try a change, certain that they would never return to the primitive state from which they desired to escape; a greater number—the majority—dread that change. Many are very reasonable; the country might gain by the change, and it would certainly obtain many advantages which it now lacks; but the existing population would certainly be losers.

As we love the people more than the land in which they live, as we prefer the well-being of the former to the splendor of the latter, we now repeat that, for our population, we very much dread some of the promised changes. The sincerity of this conviction will receive the more credit, since, personally, we have many reasons for desiring these changes.

CHAPTER IV.

MERCANTILE SYSTEM.

Our country being under a trading company, all that refers to its mercantile system acquires importance. For this reason we would say something about that which is connected with the system, and point out the distribution adopted in working it.

I. MERCANTILE ORGANIZATION.

The Governor and Company of Adventurers from England trading to Hudson's Bay entered into partnership on the issuing of the charter which was granted to them by Charles II. in 1670. Rights and privileges are not sufficient wherewith to trade ; the Company had to provide a joint stock capital. The capital, at first small, was afterwards increased, so that in 1863 it amounted to £500,000 stg., the shares being unequally distributed amongst about 300 members. All the shareholders entrusted their interests to a managing committee having a governor and a deputy at its head. Formed in London—the committee there directed the affairs of the Company, effecting sales of the hides and attending to all that concerned the prosperity of the Association.

The Hudson's Bay Company, thus organized, entered a new phase in 1863. The society called " Internationale Finançière" bought up all the shares, property, rights and privileges of the Honorable Hudson's Bay Company, as well as its Reserve Fund, which had been ably husbanded by the committee to meet unforeseen events.

As we said above,—the capital of the Company was raised to half a million pounds sterling. This sum was divided into shares of £100. The rest of the property, rights and privileges were estimated at £1,000,000, or, in all, a nominal capital of £1,500,000 sterling. The shareholders were asked and consented to sell

their shares at 200 per cent. premium, and the International Company paid £1,500,000 to the shareholders of the Hudson's Bay Company.

This transaction transferred the whole interest of the Honorable Hudson's Bay Company into the hands of the "Société Internationale Finançière," who did not long retain possession of the vast region they had just acquired. It was presently thrown on the market again, its nominal capital being raised to £2,000,000 sterling, and was for sale in shares of £20.

These shares were bought by a great number of people: in 1865 the share list included 1420 names. The new shareholders reformed the Honorable Hudson's Bay Company, elected a governor, a deputy-governor and a committee, who were to continue the business of the old Company thus modified. In the programme of the new Company was included a proposition to establish a telegraph line across all their territory, and other great improvements, to the carrying out of which they did not just then see all the difficulties which really exist.

These proceedings present three distinct commercial transactions: 1st. The sale, by the shareholders, of the first Hudson's Bay Company—a sale which gave then a net profit of 200 per cent. on the original stock, for their rights and privileges.

2nd. The speculation of the "Société Internationale Finançière," which gained half a million pounds sterling—that is, if it was able to sell all the shares, representing a capital of £2,000,000.

3rd. The purchase made by the shareholders of the new Hudson's Bay Company. They inherited the rights and privileges of the old Company; but financially they are very differently situated, as they have had to pay £2,000,000, while their predecessors, at least the original shareholders, having the same rights and privileges, and as great a profit, never paid more than £500,000.

It follows, then, that there must now be four times the net profit of former days to pay the existing shareholders equally large dividends.

Although there have been changes in the very heart of the Hudson's Bay Company in England,—in Rupert's Land its organization has remained unchanged.

The General Government and its committee—while retaining their superior authority, do not now any more than formerly, interfere

with the most difficult part of the business, that is, the peltry trade amongst the Indians. This has always been, and still is, a distinct branch of the Company's business, carried on, under a managing committee, by quite an active commercial hierarchy, having no share in the stock or property of the Company nor any interest in its privileges; they are merely paid for their labor, some by a salary or a fixed sum taken out of the gross profits, others by a portion of the net profits.

The following are the titles of the members of this hierarchy:

1st. "The Governor of Rupert's Land with a regular but varying salary.

2nd. "Chief factors"—superintendents having two shares.

3rd. "Chief traders"—superintendents having single shares.

4th. "Clerks" receiving from £75 to £100.

5th. "Apprenticed clerks" receiving from £25 to £27.

6th. "Postmasters" receiving from £40 to £75.

7th. "Interpreters" receiving from £30 to £45.

8th. A great many travellers' guides, helmsmen, pilots, bowmen for barges and boats, and middle or oarsmen, with wages from £16 to £40 sterling.

The regular salaries—from that of the governor of Rupert's Land to the lowest of the employés—are charged against the Company, and deducted from its gross profits. The interest of money in circulation is also deducted from the gross profits, and paid to the shareholders. This interest is charged at the rate of 5 per cent.

The dividends paid to the shareholders, as well as the shares paid to the chief factors and traders, being dependent on the net profits, necessarily vary with them.

These profits, when all deductions alluded to have been made from them, are divided into ten equal parts; six of these are distributed amongst the shareholders in proportion to the stock they hold; the four others are subdivided into 85 parts averaging £300 each. A chief factor receives two of these shares while he is employed and for one year after discharge. A chief trader receives similarly only one share. During six years following the first after retirement, chief traders and factors receive half pay.

The governor of Rupert's Land superintends the departments entrusted to him. To assist him, he assembles a council of the chief traders and factors annually; and from this source originate

the regulations considered necessary for carrying on the peltry trade. The duties and pay of the junior officials are settled by this council: it also submits to the governor and managing committee the names of clerks for promotion to chief trader's rank, and of chief traders for appointment to chief factorships.

The different departments are subdivided into districts. In each district there is a chief factor, or a chief trader under whose orders all the employés in the district are placed. The districts include several "posts" or "forts" entrusted to officers of different grades.

Each post keeps separate accounts shewing the profits or loss, in account with the district, just as if the business were being carried on between strangers.

The districts have also their accounts which they adjust with the factory, the depôt or the districts that supply them with men, merchandise, provisions, &c., and to whom in return they send peltry.

All these accounts are kept with an astonishing minuteness of detail. On examining them, they appear to be those rather of rival companies than of members of an association having a common interest.

This wise system and skilful book-keeping have the happy effect of creating lively emulation and a spirit of great economy.

Each officer has to render the accounts of the post entrusted to his charge. The accounts are examined, scrutinised, criticized, altered and modified by those to whom this duty is assigned.

The total expenditure of the year, compared with the total value of the peltry and other goods supplied, affords an exact measure of the success—if not of the labor—of the person in charge of the post.

Advancement depending upon success, all are interested in increasing the general profit, although the greater number of the employés have no direct interest in it.

This clever system and the strict husbanding on all hands have insured the success of the Company whose trading extends from the Atlantic to the Pacific, its ramifications passing through the whole of British America with the exception of the Maritime Provinces and the part of Canada to the south of the St Lawrence.

Supported and expanded by its judicious organization, and by the ability and zeal of a great number of its members, it has withstood trials—occasionally formidable, and generally gives good dividends to its members.

It should be told in its praise that its rule throughout the vast field of its operations has been such as to teach even the most barbarous Indians to regard it with affection, and to respect civilized man so that he may travel whither he will in perfect safety. It is unnecessary to say that individual abuses have occurred here and there, rivalry has originated them,—monopoly has multiplied them. The trade in "firewater," which is now confined to a certain district, is perhaps the only reproach which can fairly be brought against the Company as a body, as it is the only one which I know to be approved of by its government.

II. COMMERCIAL DIVISION.

The Company has divided the country into four trading districts:

1st. The Montreal Department, which includes the Company's establishments in Canada East.

2nd. The Southern Department, which includes the other Canadian establishments and those of Rupert's Land to the east of 90° W. long.

3d. The Western Department, to the west of the Rocky Mountains.

4th The Northern Department, in which I am, and of which I have previously defined the boundaries.

The Northern Department includes the 10 sub-districts as follows: Mackenzie, Athabaska, English River, Saskatchewan, Cumberland, Swan River, Red River, Rainy Lake, Norway House, lastly York District.

1st. *The Mackenzie River District*—This district, the most important from the quantity and quality of its furs, includes, besides the country surrounding Great Slave Lake, all the region watered by Mackenzie River, properly so called, and its affluents, as well as by the other rivers flowing into the Arctic Ocean. Nearly all this district is now, and must remain, hunting ground. With the exception of a few isolated spots on Mackenzie River and on Mountain River, cultivation is impossible. The cold is everywhere intense, notwithstanding the encouraging assurances afforded by an examination of isothermal lines multiplied by science on certain geographical maps, and which were certainly never traced by those who have lived in the country for any length of time.

The Mackenzie River District contains carboniferous deposits and

wells of mineral and bituminous pitch. Extensive calcareous stratification is found adjacent to primitive rock.

The principal place in the district is Fort Simpson at 61° 51′ 25″ N. lat, and 121° 51′ 15″ W. long, at the junction of Mountain and Mackenzie Rivers. The superintendent in charge of the district resides in this fort. Here, also, towards the end of August, the clerks of the various posts assemble to receive instructions from their chief, and goods for barter in the peltry trade.

Access to Mackenzie District is gained by descending the river of the same name. The difficulties of navigation in Behring's Straits have hitherto prevented any attempt being made to reach Mackenzie District by the sea. The route across the Rocky Mountains presents the most serious difficulties amounting practically, although not absolutely, to an insurmountable barrier. Beyond the Rocky Mountains, the Mackenzie District has a post which we shut out, as it were, by making that great range the western boundary of the Northern Department.

This post,—Youcan, is situated on the banks of Porcupine River. In tracing the boundaries of the Northern Department we neglected this post because we considered it to be on what was lately Russian and is now United States Territory.*

2*d. District of Athabaska.*—This district is close to the former, bounding it on the south-east. It includes the remainder of the North-west Territory, excepting, however, the region watered by the upper part of Athabaska River and its affluents, from its source to the rapids of Deer River (*rivière à la Biche.*) The greater part of this district also is incapable of cultivation. The valley of Peace River is a magnificent exception to this melancholy barrenness. On both banks of the stream there is the richest soil: the prairie here is most fertile, and dotted with clumps of the most useful timber.

Some points, too, on the Athabaska offer great advantages to settlers. Nature is splendid in this district: the valley of the little 'Clear-water" River has striking and exceptional beauties. A view of the banks of the large stream recalls the

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It is said that since the transfer of this Territory from Russia the Hudson's Bay Company have been directed by the United States authorities to withdraw their establishment at Youcan—D. R. C.

grandest rivers of the world, and one finds one's self regretting the severity of the climate, which will always be a great obstacle to the occupation of even the cultivable parts of this vast territory. Mineral riches, including sulphur, iron, bitumen and plumbago, abound all over the district. I think that there are also petroleum springs there.

The Great Athabaska River flows over immense beds of limestone broken here and there by cliffs of slate-clay, (argillaceous schist) which constantly opens out to display the rich minerals it contains. Peace River has plaster quarries and carboniferous deposits supposed to be of great value. Gold dust, concealed in large quantities of sand, is washed from the Rocky Mountains by its rapid stream. All these riches, combined with the fur supply, give Athabaska great importance.

The importation of trading necessaries, as well as the exportation of furs from the district, has been carried on, hitherto, by means of boats on River Athabaska and Clear-water River (*la rivière de l'eau claire*) which flows below the heights of Methy Portage. For two years it has been customary to travel by land to Deer Lake (*lac la Biche*) and thence to descend the river which flows out of it. This route appears to us to be much preferable to the former. Access to Athabaska may also be gained from the west, since Peace River approaches very near to Fraser River ; and although by this route it is necessary to cross the Rocky Mountains, navigation is less interrupted than in coming by the rivers from the east.

The chief place in the Athabaska District is Fort Chipewyan, situated about 58° 40′ N. lat., 104° 35′ 15″ W. long.

The fort built on the heights skirting the north of Lake Athabaska or Little Hills (*collines*) commands a grand view: to the east it is vast as the ocean: to the south is seen a delightful variety of islets against a universally verdure-covered back ground of dense thorn forest. The north discloses the tortuous windings of its compact granite confines, and the rays of the setting sun glancing from lakelets, streamlets, sandhills and the prairies which fringe the great lake. In summer the scene is as variegated as imposing. Why, then, does a long winter of seven months blend all its beauties into one icy monotony ?

3*rd. English River District.*—This third district comprises nearly all the land watered by the river of its name—the river being

also called Churchill. The neighborhood of the river's mouth belongs to York District; and Upper Beaver River—the western branch of Churchill River—flows through part of the Saskatchewan District.

In this district there are none of the riches which we described as being found in the preceding one. Some of its surface is perfectly sterile, or composed of primary rock. I know of nothing there connected with the transition period. The coal fields and Silurian formation of the neighboring district are not seen here. Upper Beaver River and the borders of the lakes which empty themselves there, present some points for cultivation. The remainder appears to be the bottom of what was once an enormous lake, not yet become salubrious. In other places elevated downs refer to another period. Nowhere are lakes so numerous. Fine forests at one time covered a part of this district: fires have destroyed nearly all of them: their remains are still to be seen on the banks of rivers and the borders of lakes.

Fish abound in almost all the lakes, making it easier, if not more enjoyable, to live here than in some other places, and affording the Aborigines an opportunity for uninterruptedly hunting for furs, which are here of the finest quality, and abundant.

The barren country which forms the northern part of this district is the home of the little cariboo, where they are to be found in countless herds.

The principal place in English River District is the post at *l'Ile à la Crosse* on the border of a lake of the same name about 55° 25′ N. lat. and 107° 55′ W. long.

English River, which flows through the district, discharges into Hudson's Bay at Port Churchill, at one time of so much importance. It appears as if the most natural route by which to enter this district would be up this large river. We mentioned, however, in the last chapter, that difficulties and dangers of navigation prevented this route being followed, and that access to the district is gained by way of the Saskatchewan and its tributary, Rapid River. A cart road open for the last two years between the Saskatchewan and Green Lake (*lac Vert*) appears to offer a better route to the northern part of the district, about which I am now talking, and of which the importance is exclusively confined to its peltry trade.

4*th. Saskatchewan River District.*—This extensive and important

division comprises the immense expanse of territory watered by the two branches of the Saskatchewan and their tributaries, down to their confluence, as well as the country of the Upper Athabaska and its affluents. This last part, cut from the North-west Territory, is very fine and fertile, although it is not usually included in what is called the "fertile belt." Part of the Saskatchewan District is sterile, part prairie land and part of the most fertile character, which we have called "forest." This district may be of great value for colonization, but not throughout its entire extent and in every respect, as we have already said, although it includes some land of the very best kind. Ever since the discovery of the country this district of the Northern Department has presented numerous advantages. The part of this district which is not forest land does not supply such fine furs as the districts to the north of it. It has, however, been of assistance to these by furnishing them with supplies necessary for transport service. The plains of Saskatchewan were, until recent years, the home of the bison (buffalo) which crowded there in countless herds at all seasons of the year.

The flesh of these animals has invariably furnished the food required in travelling. The most delicate parts of the animal, being cut into very thin slices, are dried at the fire or in the sun and are then called dried meat (*viande sèche*) ; the rest is made drier and pulverized, it is then called pounded meat(*viande pilée*). Pounded meat, mixed with melted bison suet, in the proportion of 2 to 4, forms a kind of pie, the uncooked skin of the animal taking the place of crust. The meat is rolled in the hide of the animal to protect it and preserve it, often for several years. Thus this curious food—under the name of pemmican—is sent to the market, or to be dealt with as those who wish to eat it may desire. Its name is Indian, and implies a mixture in which fat forms the principal ingredient.

The supply of pemmican, although not exhausted, is nevertheless much diminished, and all indications lead to the belief that it will shortly cease.

Like all other rivers which flow from the Rocky Mountains, the Saskatchewan carries over its clayey bed, gold dust mixed with sand. Up to the present time this source of gold has not been very productive. Gold is found only in the bed of the river which is frozen over during six months of the year, and for three months is often overflowed, so that the time during which gold may be collected is

very short. The *find* has hitherto been so small that the miners who have one after another worked for many years back have despaired of success. Gold, however, is to be found; and by making its acquisition a secondary occupation the inhabitant of Saskatchewan may, by means of it, add to the other advantages of his adopted country.

The coal mines of Saskatchewan assure it unquestionable importance. The immense coal deposits are seen exposed in the cliffs of the great river. The coal, although not of the best quality, is used by the blacksmiths of the district; and if the surface beds can thus be utilized, those more deeply embedded will surely prove superior.

The early frosts which often destroy the harvest, and the want of wood required in the manufacture of implements, are the only reasons that prevent my partaking of the enthusiasm which the excellent land excites in many. I do not know of any stone quarries sufficient to supply the requirements of large settlements. Beds of sandstone are, however, visible in the banks of the river. In different localities scattered blocks are found in great number, and perhaps indicate the proximity of masses from which they have been detached, in which case, there may be an ample supply procurable for the construction of even large works.

The Saskatchewan, like all other rivers flowing through slightly tenacious and light prairie land, runs in a very deep bed. The banks—several hundred feet high—are everywhere grooved by natural drains (*Coulée*) or ravines, often very narrow and of great depth, and in which, at certain seasons of the year, water-power can be utilized.

The principal place in Saskatchewan District is Fort Edmonton at 53° 30′ N. lat. and 113° W. long.

All this district is accessible by the large streams which traverse it. Moreover, it is possible to travel in any direction on horseback, and almost anywhere on wheels, with the solitary exception of the most wooded country in the North-west.

5th. Cumberland District.—Cumberland District is the basin of the Lower Saskatchewan, from the junction of its two principal branches down to its mouth, and of its tributaries. The chief post of the district gives it a name. Cumberland House is on the south border of lake Cumberland, called also Pine-island Lake (*lac de l'Ile aux Pins*) at 53° 57′ N. lat. and 102° 20′ W. long.

The western part of the district on the Saskatchewan as far as Cumberland House, a distance of about 200 miles, is well fitted for settlement. The remainder of the district is either covered with rocks or subject to inundation, and the whole north of this part of the district is occupied by an extensive belt of primary rocks. Limestone strata of Silurian formation neighbor these primary rocks, a geological phenomenon which, first appearing in the south, is lost sight of in English River District and reappears in Athabaska and Mackenzie River Districts.

Saskatchewan River forms a large delta before flowing into Cedar Lake (*lac Bourbon*). Up to this point its waters have been strongly charged with clay or sand. In crossing Cedar Lake the river frees itself from impurities, there its waters become limpid, rush in impetuous waves over limestone boulders, and all boiling up enter Lake Winnipeg—where ends their race.

This large river, then, carries with it not only gold dust but great quantities of clay and sand which it deposits in its course.

It is these deposits that have successively formed the land in the neighborhood of Lake Cumberland, Cedar Lake, and Moose Lake (*l' Original*) which with lakes Winnipeg, Winepegoos, Manitobah, Dauphin and St. Martins and many others surrounding them, formed, at perhaps no very remote period, the vast inland sea of which these lakes were merely the deepest parts. The limestone deposits, being the highest points, were at that time islands in the midst of this great sheet of water; these were next coated with alluvial matter and then withdrawn from their isolation and connected with the mainland by the deposits of which we have been talking, and which are not yet healthy, for there are still in these regions vast stretches of uninhabitable land. I once went up the Saskatchewan from Cedar Lake to Cumberland House, where I was not able, so to speak, to put foot to ground during the whole journey, for the country was flooded with the exception of some prominent points resting on limestone, and which very clearly indicated the formation of which I have been speaking.

Cumberland District is not of so much importance as the others to which I have alluded. It supplies some fine furs. Its innumerable pools are favorite homes of the musquash, which live there in great numbers. A portion of the district is well wooded, the rest is inferior in this respect.

6th. Swan River District.—Swan River District is to the south of Cumberland District, and extends to the frontier of the United States, including Winepegoos and Manitobah lakes and the country watered by the rivers flowing into and out of these lakes, as well as that through which Assiniboine River flows to within 60 miles from its junction with Red River. Like its neighbor to the west, Swan District includes desert, prairie and forest. It is, however, of much less importance than Saskatchewan District. Here not only is the desert sterile, but the prairie is somewhat of the same character. It is the centre of the prairie, of which I spoke before, and is not so valuable as the outskirts. Its forests are of importance, and timber of greater utility than that on the western boundary begins to appear on the eastern. Dauphin Mountains, Duck (*Canard*) Mountain, Thunder Hill, Porcupine Hills and Pass Mountains are well wooded. These hills, which are connected with Pembina Mountain, evidently formed the western bank of the immense lake to which I referred in speaking of the preceding district, and now distinctly mark the division between the transition formation on their east and the secondary formation of the plains on their west. Swan River District encloses a large extent of useful land in the midst of these alluvial deposits which are not yet sufficiently raised to be free from inundation. Between the hills noted above and lakes Winepegoos and Manitobah, as well as between the latter and the Great Winnipeg Lake, it may almost be said that the land is water. Travelling there is bad, above all in autumn when the water is becoming cold. I shall remember for a long time a journey I made towards the end of October. For many days together I had to walk up to the knees in freezing water, and more than once I got in up to my waist. The higher points of this alluvial district are very fertile. Between the Assiniboine and Dauphin and other mountains there are very valuable lands, rendered all the more valuable by supplies of timber; the streams flowing from the heights affording great facilities for its transport in spring.

In Swan River District, to the west and to the south of the Assiniboine, I do not know of a single place suitable for a large settlement.

In the Devonian formation of the western shores of lake Manitobah and Winepegoos there are very many springs strongly impregnated with salt. The inhabitants obtain salt from this source by

boiling the brine—a more economical result would be obtained by a process of slow evaporation. This salt is generally used in Red River Settlement, and is sold at from 2d to 3d a pound. It is not equal to marine salt, nor to that of Athabaska.

So good are prairie roads that one may ride anywhere, or drive even in a carriage to many places, except in the mountain and the extreme northern district.

Fort Pelly is the principal station in the district of Swan River. It is situated on the banks of the Assiniboine, at a place called the Elbow (*le Coude*) N. lat. 51° 43′ W. long. 102° 15′.

7*th. Red River District.*—Red River District is to the east of Swan River District and to the south of Lakes Manitobah and Winnipeg. Red River District is the commercial title of the colony of Assiniboia. It reaches along the Assiniboine for about 60 miles from its mouth, and along the Red River from Pembina to Lake Winnipeg.

This district is important with reference to the fur trade, not because it is a source of supply but because it is the only important centre of business transactions in the country. Besides the trade of the Honorable Hudson's Bay Company, that of its rivals is carried on here, and we have already mentioned that trade is free. All these rival traders scatter themselves from the colony, over the neighboring districts, so that a large portion of the furs of the Northern Department are imported into Red River Settlement, there to be sold to the highest bidder, and thence forwarded abroad.

Besides the peltry trade, which is more important in this district than in any of the others, general commerce here is of much consequence, and a source of considerable profit, for everything is sold at exorbitant prices, to the loss of those who may have neither the means nor the will to import for themselves. Everything is sold at from 100 to 300 per cent. over the cost price in England.

To a certain extent these extreme prices are accounted for by the great transport charges to which imported goods, more particularly heavy kinds, are subject. It cannot, however, but be a source of regret that this state of affairs chiefly affects the poorer classes of the people ; the richer are able to import for themselves.

Fort Garry, at the confluence of the Assiniboine with Red River, is at 49° 52′ N. lat. and 96° 53′ W. long., 700 feet above the level of the sea. It is the principal post of the district and at the same time the seat of Government of the colony of Assiniboia.

Red River District, not yet completely settled, is undoubtedly the part of the Northern Department best suited for colonization. Rich alluvial soil and perfectly uniform plain are universal in the district.

In speaking of the two preceding districts I referred to the immense lake which at one time occupied all the eastern region and has since dried up at some points. Before this drying up, the whole of Red River District was a part of that lake ; and inundations are now sufficiently frequent to assist our imagination in realizing that period, and to prove to us the correctness of the view I advance.

The Assiniboine valley, which was on the western side of that inland sea, is now nearly free from inundation.

The banks of Red River now alone suffer. Flowing through the very centre of the basin, and its deepest part, this river drains an enormous plateau.

Like the Saskatchewan—Red River is muddy. The clayey matter which it holds in suspension is deposited at its mouth and forms a delta. These deposits, which are constantly encroaching on Lake Winnipeg, extend the valley and effect changes at the south of the Great Lake similar to those effected by the Saskatchewan to the west.

Here, too, the land is not yet drained ; there are swamps several miles in extent which are gradually becoming healthy. At first clothing themselves with reeds, then with hay and lastly forming beautiful prairie, they assist, so to speak, in making the plains we inhabit.

8*th. Rainy Lake District.*—The eighth district comprises the region watered by Winnipeg River, its sources and its affluents. This country is generally ill-suited for colonization, except on the banks of Rainy River, some islands on the Lake of the Woods and some isolated spots on Winnipeg River.

Fine forests, in which are many of the most useful kinds f timber, as I said before, give a great advantage to this section of the country. It is, in fact, almost the only place in the Northern Department which furnishes first-class timber.

Game is here less plentiful than elsewhere. Furs are found here as in all wooded districts.

The district also produces wild rice, *zizania aquatica*, known to travellers as "wild oats" (*folle avoine.*) I am not aware that

this grain is to be found elsewhere in the country. The precious plant grows in sluggish and shallow rivers, and is a valuable resource. The Indians collect the grain in canoes by beating the grass with sticks as they paddle through the crop. They heat the grain to free it from its husk, and make soup of it. It makes an excellent soup, and is preferred by many to common rice.

Rainy Lake District, which connects Red River Settlement with the west of Canada, appears to be the natural route by which British subjects would travel to this part of our Gracious Sovereign's dominions. Roads through it have been made the subject of special study by order of the Canadian Government. The resulting official reports may greatly assist in enlightening the public mind; but I take leave to say that the difficulties appear to me to be greater and the advantages less than they are estimated by the authors of these reports.

The Winnipeg, like Churchill River and all others flowing over rocks, presents very remarkable beauties.

Cataracts, waterfalls and rapids, we have said, constantly interrupt navigation.

As it were in compensation these obstructions multiply the grand and picturesque views which they are ever unfolding to the enraptured gaze of the astonished traveller. Willingly he halts by cataracts to watch the roaring waters leaping down in foaming waves, and again rushing forward to new leaps, dividing the flood in descending steps. Then the whirling pool returns back on itself as if to examine the obstacle overcome with so great effort; and in the violently agitated water, under the falls, eddies twirl round one another in wild confusion. And now, become calm, the stream rests in mirrored lakes, to the margins of which come rocks to admire themselves and to display the richness and variety of their forms.

Fort Francis, at the extremity of Rainy Lake, was, for a long time, the principal post in the district. It has, however, ceded the post of honor to Fort Alexander, at the mouth of Winnipeg River, only a few leagues from the mouth of Red River.

9*th. Norway House District* (*rivière aux Brochets.*)—This district stretches to the east and to the north from Lake Winnipeg, to the ridge of rocks which forms its massive boundary.

The rough and rugged beauties of River Winnipeg have pre-

pared us for the wild character of the country we now enter. Resting throughout on a bed of primary rock, hardly anything is to be seen in this district but lakes and bare rocks. There are a few fine woods, but only at isolated and unimportant points.

The climate is everywhere extremely severe; the proximity of Hudson's Bay lowers the temperature very much. The whole region, too, is remarkably poor, nevertheless fish and fur-bearing animals abound in it, but beyond these there is nothing to attract. The traveller who arrives in summer may, indeed, enjoy himself for a few days; seated on bare masses of rock he may contemplate, with some admiration, this expanse of the great Laurentian system, the strong belt with which God has surrounded all the great lakes of North America; he may derive pleasure, too, from a multitude of small lakes jewelled with thousands of islets, as various in color as in form, and enlivened by innumerable flocks of aquatic birds flying over and resting on them. This, doubtless, is pleasing, but when we regard the reality of the inhabitants' quiet and monotonous life—how desolate a country it is! The spaces between the rocks do not always form beautiful lakes, on the contrary they are generally muddy and almost impassable marshes.

Many parts of the district are frozen up for nine months in the year. I found the ground frozen a foot deep in July. One may judge from this what is to be got out of this desolate country.

Norway House, near the mouth of the small Jack River (*la rivière aux Brochets*) is the principal post in the district. The establishment is about 54° N. lat. and 98° 10′ W. long. Up to recent years, that is, before a part of the trade of the country passed through the United States, all passed by Norway House; all the brigades of the various districts went there; besides, goods for the most distant districts were stored there during the winter.

This post has now lost some of its importance; it retains, however, sufficient to be still one of the largest of the Hudson's Bay Company's depôts.

10*th.*—*York District.* The height of lands whence streams flow directly into Hudson's Bay is the limit of York District. The large rivers Nelson and Churchill do not rise in that ridge, but, passing through it, enter the district.

This is a country of desolation. A large portion of it is covered with masses of granite; and beds of Silurian formation close in the flanks of this vast charnel-house.

The alluvial deposits skirting Hudson's Bay do not make a pleasure garden of its neighborhood. The climate there is terrible ; it freezes in every month of the year. The proximity of arctic ice lowers the temperature much more than might be expected in that latitude, for the district reaches to the 53rd parallel.

York Factory, the principal post, is not at the mouth of Nelson River but at that of Hayes River, although the bay into which both rivers flow is called Port Nelson. The geographical position of the post is 57° N. lat. and 92° 25′ W. long.

Fort Churchill,—at one time the most important place on Hudson's Bay, where were built strategical works of great strength for the period, and at great cost, for the materials were drawn from England,—is now a post of but very secondary importance. The great difficulty in providing firewood there makes the place almost uninhabitable.

A straight line from Churchill to the mouth of Mackenzie's River crosses the " Barren grounds,"—the most unfortunate country in the world—the home of Esquimaux who can barely sustain life except along the coast. This diagonal line, about 1,200 miles in length, has on its north-east a great extent of country in which there is not a single trading post—in which there is barely a trace of vegetation, and which is known only by the reports of hardy explorers who have suffered greatly in crossing it.

York District owes its importance to its harbors, for 20 years ago all exports and imports passed through it. The trade of the North-west Company and others from Canada passed by Lake Superior : whereas Hudson's Bay was the route invariably adopted by the rival company, up to the time when the United States afforded greater facilities.

After this sketch of the mercantile system of the Northern Department I should like to give statistics to prove its importance. Unfortunately my information is incomplete.

The exports, it is easy to understand, consist almost entirely of furs. I can give the number of them bought by the Honorable Hudson's Cay Company in 1865.

The table, no doubt, does not include the grand total of the fur trade in the department. By doubling the figures for Red River District an approximately true result will be obtained, for the purchase of furs by other traders than the Company is almost entirely confined to this district ; and, without being certain of the fact, I believe that the Company purchases about half the quantity imported into the district.

FURS

BOUGHT BY THE HONORABLE HUDSON'S BAY COMPANY

IN 1865.

DISTRICTS.	Badgers.	BEARS.				Beavers.	Buffalo Robes.	Ermines.	FOXES.						Pékan or Fisher.	Lynxes.	Martens.	Minks.	Musquash.	Musk-Ox.	Otters.	Racoons.	Skunks.	Marmots.	Wolves.	Wolverines.	Squirrels.
		Black.	Brown.	Grey.	White.				Blue.	Silver.	Cross.	Red.	White.	Kitt.													
Mackenzie River	....	492	27	19	6	8490	.....	....	7	76	347	445	999	....	9	3311	16452	138	6976	25	110	..	....	....	45	75	....
Athabaskaw	....	306	39	10	..	12595	.....	....	..	108	426	563	....	....	46	3511	3917	423	4770	..	184	..	....	....	27	48	....
English River	5	376	77	6	..	3669	52	....	..	33	102	129	8	28	61	4495	4076	3002	10790	..	615	..	....	....	50	44	....
Cumberland	28	88	22	5	..	3244	1704	....	..	6	79	326	....	123	83	1643	2330	2057	18000	..	366	..	4	1	316	6	....
Siskatchewan	133	515	86	42	..	11954	3031	....	..	21	83	274	....	462	113	4185	2714	380	4656	..	180	..	10	....	1608	46	....
Swan River	165	120	87	20	..	3308	4228	....	..	4	148	2600	....	1126	46	1798	747	1862	4154	..	237	..	345	18	1477	17	....
Red River	310	333	107	11	..	1851	8480	188	..	6	217	3886	....	2698	217	1982	2065	6368	64578	..	442	47	362	21	4045	21	....
Rainy Lake	....	179	9	....	..	985	.....	....	..	58	265	604	....	....	322	1865	840	6633	27192	..	523	..	1163	87	....	3	....
Norway House	1	120	7	....	..	9727	.....	....	..	37	141	182	4	....	393	3297	6265	2773	6320	..	1018	..	2	31	....	24	....
York	....	144	4	....	3	12551	.....	55	13	64	201	292	1598	....	106	964	7251	5412	9545	66	2535	..	4	20	128	37	1445
	642	2643	465	113	9	68374	17495	243	20	413	2009	9301	2609	4437	1366	27051	46657	29038	156981	91	6210	47	1790	178	7696	321	1445

CHAPTER V.

RELIGIOUS DIVISION.

Under this title we would enumerate the different fields assigned to those charged with preaching the Gospel in the Northern Department, and also the different religious denominations which are to be found in the country, at least those in it having ministers and congregations.

The Roman Catholic Church here, as elsewhere, was the first to establish missions.

The jurisdiction of the Bishop of Quebec extended over all this country from its discovery down to 1844. From 1822 to the last mentioned year jurisdiction was exercised through the agency of an assistant. It was then the Holy See erected it into a vicarship to make a regular bishopric of it in 1847.

The diocese of St. Boniface included all the Northern Department until 1862, at which date its incumbent had it divided by the erection of the Mackenzie River vicarship. Thus matters remained until 1867. The Bishop of St. Boniface, being at Rome, asked for a new division of the diocese, proposing the creation of a Saskatchewan River vicarship or a diocese of St. Albert. The request was favorably received and the Holy See promised to grant it, so that we may now say that the Roman Catholic Church has entrusted the Northern Department to the jurisdiction of three prelates:

1st, the Bishop of St. Boniface.

2nd, the Vicar of Mackenzie River.

3rd, the Vicar of Saskatchewan, or the Bishop of St. Albert.

The English Church has sent clergy into the country since 1820. In 1844 the Anglican Lord Bishop of Quebec visited the colony of Assiniboia, and his influence obtained the creation of a bishopric in this vast territory. In 1849 the first Anglican Bishop arrived at Red River with Royal Letters Patent, conferring upon him the title of Lord Bishop of Rupert's Land. The jurisdiction of this prelate,

such as the English Church is able to confer on its Colonial Bishops, extends not only throughout the Northern Department, but, as his title indicates, over the whole of Rupert's Land. His Lordship selected for his cathedral the church of St. John in the centre of the colony of Assiniboia, not more than a couple of miles from the cathedral of St. Boniface.

After the Episcopalians came the Wesleyan Methodists, who arrived in 1840 from Canada. They immediately selected several stations which they still occupy, and have since added others.

Lastly, in 1851, there came a Presbyterian clergyman from Canada, to take charge of a congregation of 300 of his church who had hitherto been attending the English Church. From the establishment of the colony the Scotch had been begging for a clergyman, but it was not until now that one was sent to them. And, although they were the first colonists to occupy the soil, the richest farmers and the most independent, they were the last to have a minister and a church.

The three Protestants sects to which I have alluded have branches in the interior of the country.

In the synoptic table which follows I enumerate all the posts or centres of congregations in the country. The following abbreviations are used :

M.C.—Places at which there are Roman Catholic Missions.
A. — " " " Anglican Episcopalians.
M. — " " " Methodists.
P. — " " " Presbyterians.

I. DIOCESE OF ST. BONIFACE.

The bishop of this diocese, whose cathedral is at St. Boniface, holds jurisdiction over

1st—Red River Valley,
2nd—Lower Assiniboine Valley,
3rd—Swan River District,
4th—Rainy Lake District,
5th—Norway House District,
6th—The part of York District of which the streams do not flow into River Churchill.

I. The Valley of Red River.	L'Assomption	M. C.
	Ste. Agathe	M. C.
	St. Norbert	M. C.
	St. Vital	M. C.
	St. Boniface	M.C. A.M.P.
	Ste. Anne (or *la Seine* River)	M. C.
	St. John	M. C. A.
	Kildonan	P.
	St. Paul	M. C. A.
	St. Andrew	A. P.
	St. Clement	A.
	St. Peter	M. C. A.
II. Lower Assiniboine River.	St. Mary	A.
	St. Margaret	A.
	St. Ann	A. M. P.
	St. Paul	M. C.
	St. François Xavier	M. C.
	Trinity Church	A. M. P.
	St. Charles	M. C.
	St. James	M. C. A. M.
III. Swan River District.	Fort Pelly	A.
	Thunder Hill	A.
	Egg Lake	
	Calling Lake	M. C.
	Fort Ellice	A.
	Shoal River	M. C. A.
	Duck bay	M. C.
	Water-hen River (*Poule-d'eau*)	M. C.
	Fairfort	A.
	Manitobah	M. C. A.
	White River	M. C. A.
	Oak Point	M. C.
	St. Lawrence	M. C.
IV. Rainy Lake District.	Fort Alexander	M. C. A.
	Eagle's Nest	
	Islington	A.
	Rat Portage	
	Fort Francis	M. C.
	Lake Seul	M. C.
V. Norway House District.	Norway House	M. C.
	Split Lake (*lac Fendu*)	
	Nelson River	
	Beren's River	
	Great Rapid	

VI. York District.	York Factory	A.
	Severn	
	Trout Lake	
	Oxford House	M.
	Jackson Bay	
	God's Lake	
	Iron Lake	

VICARSHIP OF MACKENZIE RIVER.

This vicarship includes :

1st.—Mackenzie River District,

2nd—Athabaska District,

The Providence Mission, on the banks of Mackenzie River at the outflow of Great Slave Lake, is the head quarters of the vicarship.

I. Mackenzie River District.	Fort Resolution	M. C.
	Fort Rea	M. C.
	Big Island	M. C.
	Providence	M. C.
	Fort Simpson	M. C. A.
	Liard Fort	M. C.
	Fort Norman	M. C. A.
	Great Bear Lake	M. C. A.
	Fort Good Hope	M. C.
	Peel's River	M. C. A.
	Stone House	M. C. A.
	Fort Youcan	A.
II. Athabaska District.	Fort Chipewyan	M. C.
	Fond du Lac	M. C.
	Vermillion Fort	M. C.
	Dunvagan	M. C.
	Fort St. John	M. C.

THE SASKATCHEWAN VICARSHIP.

The bishop to whom is entrusted this portion of our Lord's vineyard has zealously labored and exercised authority

1st—In Saskatchewan River District,

2nd—In English River District,

3rd—In Cumberland District,

4th—In the western part of York District watered by the streams flowing into Churchill River.

I. Saskatchewan River District.	Fort Jasper	M. C.
	Little Slave Lake	M. C.
	Ste. Anne Lake	M. C.
	Deer Lake	M. C.
	Mountain House	M. C.
	Turtle Lake	M.
	Buffalo Lake (*Lac du Bœuf*)	M. C.
	Fort Edmonton	M. C. M.
	St. Albert	M. C.
	Victoria	M.
	White Fish Lake	M.
	St. Paul	M. C.
	Fort Pitt	M. C.
	Fort Carlton	M. C.
	Prince Albert	P.
II. English River District.	Crosse Island (*l'Ile à la Crosse*)	M. C.
	Methy Portage (*Portage à la Loche*)	M. C.
	Green Lake (*Lac Vert*)	M. C.
	Cold Lake	M. C.
	Stanley	A.
	Cariboo Lake	M. C.
	Fond du Lac	M. C.
III. Cumberland District.	Nepowewin	A.
	Cumberland	A.
	Pas	A.
	L'Orignal Lake (or Moose Lake)	
	Grand Rapid	
IV. York District, Western Part.	Churchill	

CHAPTER VI.

POPULATION.

The study of the population of the Northern Department presents a vast field of interest to thoughtful minds. It presents a remarkable mixture and combination of races.

Diversity of origin and variety of language impart a distinct character to our people.

Fourteen civilized nations and twenty-two Indian tribes, with Half-breeds—the offspring of intermarriage between these different races, have scattered over the immense territory, about which I em writing, the extremely small population inhabiting it.

I shall first say something about the foreigners, next I shall speak of those of mixed parentage, and, lastly, I shall treat of the Aborigines or Indians.

THE FOREIGNERS.

Scotland and the Orkney Isles have supplied the strongest contingent to the foreign population of the Northern Department. The greatest number of the Honorable Hudson's Bay Company's superior officers are Scotch. The Red River colony speaks with considerable pride of its "Scotch Settlement"; and nearly all the stations in the interior, even those in the most remote parts of the country, have some Orkney men as employés.

Alongside this first foreign element of population, range the French Canadians, who are, however, very differently situated.

Discovered and occupied by Canadians before the conquest of La Nouvelle France by England, the country has lost its original owners. Ruined by the fortune of war our forefathers saw themselves stripped of all they possessed here, as it were in the very heart of their country; conquered, in spite of their heroism, they were forced to submit to the consequences of defeat and to serve their new masters.

Companies, called English but generally composed of Scotchmen, were formed in Canada to continue to make the most of the rich furs of the forests of the north. Necessity obliged them at first to accept the co-operation of French Canadians, who maintained their influence by the share they took in the working of the companies. Imperceptibly the French Canadians withdrew themselves or were shut out from lucrative appointments. It was, nevertheless, advisable to retain the French Canadian element to perform the work of that body of hardy and active *voyageurs* who were then without rivals. A knowledge of the French language was even required of all who entered the service of the North-west Company. All officers had occasion to use French in conveying orders to their subalterns who spoke no other language. The maintenance of the readily acknowledged prestige which the discoverers of the country knew how to win from the Indians seemed, too, to require the use of French. This circumstance explains how, after the Scotch, the French Canadian element is the most important.

The other countries which have supplied a portion of our population are England, Ireland, Germany, Switzerland, France, Norway, Italy, the United States, Mexico and Central America. It would be useless to study the distinctive characters of people from each of these countries; they are sufficiently well known, although the exceptional circumstances of our lives modify them in a peculiar manner.

A few individuals from the neighboring great Republic are here; but the American element has produced no marked effect. If the Americans form a party it is only with a view to celebrating the 4th of July, to smile at the thought, more or less serious, that one of these days we shall be theirs, to accumulate a fortune, if there be means of so doing without too much exertion, and, in a few cases, to join with some disaffected individuals from the Province of Ontario to make common complaint about the state of the country; at the same time clearly indicating their conviction that all would be well if only their own interests were more favored.

Although many nations contribute to our population, our community is divided into only two sections, the French and the English. This nomenclature does not uniformly point to nationality, but refers to the languages spoken, and embraces those who have been grouped with one or other of these divisions by special circumstances.

The so-called English population occupies a more important place in our midst than does that in which the French element predominates. It is not difficult to understand the cause of this difference. Greater opulence is naturally the share of the English, for from their ranks are drawn the superior officers of the Hudson's Bay Company, and it is under the shadow of its wings that they retire in the decline of life, electing to remain in their adopted country rather than to return to their native land. Another reason for the greater prosperity of the English is that they include a great majority of the women who come from abroad. The French, who founded Red River Settlement,* and who have passed away, had with them only four Canadian women. Whoever has seen the gentle, sweet and pious influence of our mothers, in our happy and well-ordered Canadian homes, will readily appreciate the great void there is among our French people from the want of women's influence in their family circles. In speaking of this section it is more correct to talk of individuals than of families, for the French or French Canadian family did either not exist or were so few that they could not form society.

At first, too, the English had also the advantage of superior education, the natural result of the causes to which we have just alluded, as originating their superiority in some other respects.

The French population of the Department of the North console themselves for their inferiority with the reflection that there is a law of universal compensation. If their " rôle" has been a secondary one, they have kept in the second place on many occasions when to shine in the first was no subject for boasting.

Recruited from the lower ranks of their native country this little people has many faults with which to reproach itself. It justly felicitates itself, however, on having retained so much of its early education as to be incapable, at least with premeditation and deliberation, of much that the indifference of others renders easy and natural. Poor and despised since long ago, this people is aided by traditional history to console itself under contempt which it believes

* Red River Settlement was founded in 1812 by the Earl of Selkirk, who sent out several Scotch families in that year. On the 18th July, 1817, the land on which the settlement is established, was first bought from the Indians by the Earl, who subsequently transferred his purchased title to the Honorable Hudson's Bay Company. D. R. C.

in certain respects to be an honor. Besides, his experience must be very limited who thinks all advantages are concentrated on one point and all wretchedness enclosed within so small a circle. The cold contempt of national pride is often a most fruitful subject for merry and witty joking by those who are despised, and one must not wonder at what the different classes of our population say and think of one another. Indeed, there is probably no other place on earth where so much harmony prevails amongst people of different origin. Not only is there no antagonism, but, as an almost invariable rule, it may be said that all feel like brothers and endeavor to rival one another in good deeds. Only last week a respectable old man, talking to me of this smoothness of intercourse between the different sections of our population, said " I have been very often among the French ; I have but one thing against them, they have constantly endeavored to kill me with politeness and kindness. And the French when speaking of their good neighbors, the Scotch, have always been careful to add, " They are indeed nice people ; they are so agreeable when met on the road, and so hospitable in their houses."

I thought it of importance to establish the existence of good feeling because the events which occurred half a century ago might naturally create a very different impression. At that time two great rival companies competed for the fur trade. The North-west Company formed of, or at least directed by, Scotchmen, required that its members should speak French, and all its junior employés were French Canadians, so that the Company appeared to be a continuation of that formerly established in Nouvelle France. The Indians, when referring to this Company, always spoke of its members as " the French." The English, on the contrary, was the designation universally used in referring to the members of the Hudson's Bay Company, although its officers were generally Scotch and its employés Orkney men. Commercial interests produced bitter rivalry, so bitter indeed that the word Englishman applied by a Scotchman of the North-west Company to a fellow-countryman of the Hudson's Bay Company became a term of contempt.

The employés of the rival companies, without being more zealous than their chiefs,—as sometimes happens, but was now almost impossible—shared with them their animosity, cordially hated one another and regarded their opponents with supreme contempt. Neverthe-

less it is deserving of special notice that national rivalry did not exist, although the epithets used might lead to a contrary conclusion. The contest was simply commercial rivalry. It ended in the amalgamation of the companies; and since that event French, English, Scotch and others form one people amongst whom reigns perfect *entente cordiale*. This, however, does not prevent the occurrence of little jealousies and trifling accusations, but the accusations and jealousies are such as occur between brothers.

A newspaper is published in the colony, and although it is in English, and almost entirely supported by the English-speaking population, whatever other faults may be attributed to it, we must in justice say that all those who have filled its editorial chair have had the good sense to avoid all questions likely to provoke unfortunate disputes involving nationality, which could only serve to injure the people and to check the growth of their prosperity.

I would gladly hold this example up to numerous newspapers in other countries, where they appear to require the sacrifice of some of their fellow-countrymen, that on the ruin they may build up the reputation of their own special nationality.

The foreign population of the Northern Department does not exceed 4,000.

THE HALF-BREEDS.

This is the name given to all inhabitants of mixed origin, more particularly to those tracing their parentage to both civilized nations and Indian tribes.

We mentioned in the foregoing part of this chapter that there are representatives of fourteen civilized nations and of twenty-two Indian tribes amongst the inhabitants. Marriages are contracted between the men of the different nations and the women of the different tribes.

The offspring of these alliances or their descendants, however traced, are called Half-breeds, in French, *metis*; some English authors use the term Half-blood, an expression not used in this country and applicable in a literal sense to only such of the Half-breeds as are equally allied to Indians and to white races. It is plain, relationship cannot be thus equally distributed in all cases. In some instances the term Quadroon is applied to those having only

one-fourth of the blood in their veins Indian; as, for example, those of whom one grandmother is Indian. We use the word Half-breed to designate all who, not being pure Indians, are related to them in any degree. It matters not from what tribe the mother may spring, no allusion is ever made to such a distinction. With reference to paternal descent, however, the Half-breeds of the Northern Department, just as is the case with the foreign inhabitants, are divided into two classes distinguished as "French" or Canadian Half-breeds and English Half-breeds.

This classification is principally based upon the language spoken, and is such that we may find Sutherlands and Greys amongst the French Half-breeds, and Lamberts and Parisiens amongst the English. Chance circumstances have imported people of various origin into one or other of these two classes. A small colony of Iroquois from Canada went to the Rocky Mountains. There they allied themselves with the tribes of the locality, and, curious to relate, the offspring of these alliances are classed among our Half-breeds. The descendants of those savage warriors who made our forefathers in their pioneer Canadian homes, tremble for their lives, in whose veins there flows not a drop of white man's blood, are called French Half-breeds.

The poor Iroquois owing their escape from barbarism to the Roman Catholic faith carried it with them from Canada. Isolated in the Rocky Mountains in the midst of tribes hitherto entirely infidel, they did not neglect the precious gift they had received, they transmitted it to their children, offspring of their marriage with the infidel tribes; and a few hundred of these Iroquois Half-breeds waited only for the arrival of priests to complete the religious education of which they learnt the first lessons from their brothers on the laps of their infidel mothers. It is this circumstance which connects them with the French Half-breeds, with whom they mingle and combine as one race of people. Before we discuss the differences which may mark the Half-breeds of different origins I desire to speak of Half-breeds generally.

The Northern Department contains about 15,000 Half-breeds. Abroad the term Half-breeds, or descendants from Indians, is understood by many, I know, in no very complimentary sense. Here it is far otherwise: our Half-breeds are not an inferior race. Far from blushing for their origin they are proud of it, and are simply

imbued with the same feeling of superiority over other races, even the most civilized, that these experience towards one another.

A Frenchman is alway proud of his birth because he belongs to "the Great Nation." An Englishman puffs himself out with his good luck on having had his cradle lit up by the rays of "powerful Albion's" sun; and who can describe the Spaniard's feelings of noble pride as he tells his children of the glories of "Ancient Castille?" This sentiment of national pride God has implanted in us for our gratification. That which is most loved—loved first—is it not one's home, one's country? Justifiable pride, and the love of all that God has rendered dear to us, permit all men without offence to any, to sing:

> "Mid pleasures and palaces though we may roam,
> Be it ever so humble there's no place like home."

or, again—

> "Lives there the man with soul so dead,
> Who never to himself hath said,
> This is my own, my native, land."

This pride of birth I willingly allow in others as I claim it for myself; besides I am far, very far, from reproaching our Half-breeds for their feeling. Every race has its share of good qualities, as have all the poor children of Adam their share of misery, and this whether we regard them collectively or single out individuals.

The Half-breeds are a race of handsome men, large, strong and well made; although generally swarthy, a great many of them are very fair, shewing no sign of Indian extraction.

The Half-breeds are intrepid and indefatigable travellers, and their strength and agility are surprising. In their winter journeys they usually run, and rarely shew signs of fatigue. Their summer journeys, especially such as are made in boats, demand of them double exertion, to which they are equal. The Half-breeds appear to possess an instinct peculiarly Indian, and which other people hardly ever possess; it is the power to steer across forests and prairies without any information other than a knowledge of the general lay of the country which is insufficient for all others, and they cannot always satisfactorily explain their power to themselves. They are nearly all remarkable for great power of observation:

nothing escapes their eye, and it may be said that all they have seen remains indelibly graven on their minds. How often I have been surprised, in travelling, by hearing my companions calling out, in the middle of a dense forest, for example: "I passed by here three or four years ago and there was a branch of such a shape on this tree, it has disappeared," or, arriving at a rapid, which they had seen only once or twice: "Take care, there was a sharp stone here; as the water is low this year, it may injure the boat." On the vast prairies they appear to recall the slightest accidents of the ground, and if they are asked for information they give a description such as a proprietor could, with difficulty, give about his own small holding; and, after very minute details, they complete your surprise by adding: "I don't know that place well, I was only once there, a long time ago." A glance is sufficient to enable them afterwards to recognize all the horses of a large herd which does not belong to them, and after a considerable lapse of time they can tell the differences between one horse of the herd and another which they may or may not have seen at the same time. This is sufficient evidence of their keenness of observation. Besides, without appearing to be taking notice, they eye a man and estimate his character with surprising ease and correctness.

Last autumn I arrived at St. Cloud with seven new missionaries. The Half-breeds who came to meet us were at the Railway station; they desired to pay their respects to my companions and remained for a few minutes on the platform in the midst of the crowd and bustle on the arrival of the train. I then went away with them to visit their camp. How great was my surprise to hear from my guide, his opinion—shared by his companions, who had seen us arrve, —of my party. In the course of the few minutes which had elapsed they had so correctly scanned my fellow-travellers that we were all very much astonished to recognize the accuracy of their opinion of us formed at a glance.

Their facility of observation is a source of true enjoyment to our Half-breeds, particularly when a stranger comes amongst them who holds himself aloof for fear of expressing the contempt in which his conceit holds all that is Indian. The curiosity of our men seizes on his appearance, and with quiet and unconcerned manners they study the unsuspecting stranger; then removing the varnish of civilization they clothe him according to their fancy.

I declare that, many a time, I have had to burst out laughing on hearing the waggish jests, full of wit and humor, excited in their observing minds by pedantry.

Our good children of the North are not deficient in wit; it may be said, too, that they are intelligent. Those of the Half-breeds who have had opportunities for self-instruction have generally shewn marked talent, and in the different ranks of society they are seen filling the offices entrusted to them with honor. They learn languages with astonishing ease. As a rule they display more dexterity and diversified resource than the great number of men of their own social standing with whom they come in contact. It is in travelling that one has occasion to admire these qualities, without which it would be impossible to extricate oneself from the difficulties to be met with in crossing the vast solitudes which we have to traverse. Many engineers or even ingenious officers might here learn useful lessons. The skill of the Half-breeds as mounted hunters is probably unequalled.

These various points of superiority, which strikingly shew themselves in their numerous journeys with strangers, compensate our Half-breeds for the little humiliations to which they are occasionally obliged to submit, and largely assist in making them contented with their lot.

To these mental characteristics are added many natural signs of warm-heartedness. Half-breeds are not malicious, on the contrary they are generally very tender-hearted. Generous to excess, they do not hesitate to deprive themselves, even of necessaries, to relieve not only those whom they like, but also strangers who are nothing to them and whom they may never see again.

Hospitality, so acceptable to the poor wayfarer, is "*par excellence*" a Half-breed virtue. They say themselves, and they verify their saying, "that it is impossible to eat in the presence of anyone without offering them a share, even if it be but of a mouthful."

Accustomed from their infancy to journeys and prolonged absence, they still love their relations, and always experience renewed happiness on returning to their homes.

Half-breed families are generally large, and this is enough to shew the falsehood and absurdity of those who assert that Indians are a different species from civilized races, assigning as proof of their assertion, the extinction of Half-breed families when left to

themselves. I would not have noticed this nonsense, had it not been seriously written by men who should have known better.

Half-breeds love their children very much ; I am sorry I cannot say that they love them well. The mothers especially too often sacrifice the true welfare of their children for the delight of watching them, in fear of rebuking them and bringing them up properly. Whatever the character of the affection, it is certainly very strong and sincere, and so much the more disinterested since, in not a few cases, the love is unreturned.

Another happy trait in the character of our dear Half-breeds is their patience under trials ; when others would fly into a passion, swear and blaspheme, they laugh, joke, and suffer their misfortune with the best grace. Comparatively great losses are also submitted to with large mind.

Theft is a crime scarcely if at all known amongst Half-breeds. The fact is that the coming of strangers has alone obliged us to protect ourselves with lock and key. Even in the centre of Red River Settlement, and without any kind of police, cases of theft are extremely rare. Thousands of articles easy to steal and conceal are left about everywhere without care, and their loss is quite exceptional.

Blasphemy, unfortunately as frequent as shocking from the lips of a great many Christians, is hardly ever heard in Half-breed meetings. It is indeed very difficult to express the sadness which overtakes me on this account when obliged to travel in so-called civilized countries, and particularly in the United States.

I like to authenticate these characteristics, because their enumeration alone is the best possible refutation of the false accusations often brought forward against those of whom we are writing.

" This picture is not at all black," some one may say ; " amongst its shadows there is even a profusion of light." The picture is not complete ; to finish it shadows must be added, and the love that I bear to the Half-breeds, who know that they are dear to me, allows me, without fear, to enter on the delicate task of enumerating their faults.

The most striking fault of the Half-breeds appears to me to be the ease with which they resign themselves to the allurements of pleasure. Of lively disposition, ardent and playful, gratification is a necessity to them, and if a source of pleasure presents itself they

sacrifice everything for its enjoyment. Hence a great waste of time, and a disregard, often too easy, of important duties; hence frivolity and unsteadiness of character which appear to be the natural index of graver vices than those with which they can truly be charged.

This love of enjoyment too often makes them drunkards, they drink to amuse themselves, and yet, almost invariably, drunkenness deprives them of their ordinary gentleness and drives them to deplorable excesses. Drunkenness, in the case of most of those giving themselves up to it, is madness. They scream, they shout, they fight, they tear themselves and then they drop tears of remorse. Love of pleasure necessarily does away with self-constraint. Work is too much of a restraint, and too often there is indolence. They lounge about seeking pleasure when they hope to meet with gratification, and again they lounge about that they may enjoy doing nothing. Generous hospitality encourages the evil, and the loungers pass from house to house, certain of an invitation to enter. Not always sufficiently considerate in accepting proffered hospitality, they sometimes install themselves, for a week at a time, where their presence is often not desired.

The open air which one breathes, the unbounded liberty enjoyed in this country, and the ease of living in one way or another, all these inspire the minds and hearts of our youth with a passionate love of freedom. At 15 years of age they consider themselves men, and boldly enter on their parts. If dissatisfied with the paternal roof they leave it; if under engagements they dislike, they break the ties without scruple; if it is their bad luck to be at school, they immediately fly from it; in short, they are free and will not suffer restraint. We may add that their poor home education, due principally to the mother's want of firmness, is far from counteracting this unfortunate disposition. This kind of unsteadiness of character is nursed and developed by the journeys which are a necessity peculiar to our position. It is this same disposition that explains why mechanical arts are so little cultivated by our Half-breeds. We said above that they display great dexterity and variety of resource, they accomplish more or less perfectly all that their inclination leads them to undertake. They are ingenious and skilful, and if trained would become superior artizans; but, to arrive at this they would have to submit to restraint, personal

inconvenience, and the regular service of apprenticeship, too great sacrifices to be expected of our youth. Our mechanics are nearly all foreigners.

This yielding to the temptation of the moment, this lack of self-control, does not render our Half-breeds vicious, mischievous, or hurtful to others, but makes them often too thoughtless and improvident, and deprives them of a share of the many advantages which the present condition of the country offers for their acceptance.

Too often I have heard parents justly complain of the ingratitude of their sons. This reproach is not generally applicable to the daughters. These return the affection lavished on them by their mothers, blind though it often is.

The foregoing long list of characteristics and faults, is the result of my observation during twenty-three years of daily intercourse with Half-breeds of various origin. These traits of character are not peculiar to French Half-breeds, but belong as well to others. In writing these lines I am not ignorant of the impression they will make on the minds of certain persons who may read them. I know that they will readily take advantage of my evidence to prove, and even to exaggerate the weaknesses of the Half-breeds, especially of the French. To men thus disposed I will say, and repeat as often as may be necessary, that their version would be a misrepresentation of my experience and feeling. I esteem the English Half-breeds, but they will excuse me for asserting that in character they are in nowise the superiors of their fellow-countrymen, the French Half-breeds. The latter have been despised, vilified, and accused, often unfairly and unjustly. These charges, when their source is known, lose all their force, or rather react with full power upon those who originated them. I shall mention but two examples: On my arrival in the country I read letters written by a man who had achieved some celebrity. In these letters, the writer, after expressing great contempt for the French Half-breeds, continued nearly in the following words:

"They (the English Half-breeds) have more self-respect than the French. The latter don't hesitate to marry Indian women; the former regard such marriages with abhorrence."

Were I capable of rejoicing at evil, my national pride, wounded by this insulting sentence, would be amply revenged in the knowledge

that the author of those words, so full of apparent dignity, at the very time he was writing them, taking advantage of her senselessness was the paramour of one of the most disgusting of Indian women, and she has left him two children to inherit his noble name.

I have here a work entitled "Journey from the Atlantic to the Pacific." This, in many respects, interesting work has enjoyed a considerable circulation, and has even been translated. I knew the Journey before it was printed, for the author had already put his experience in "black and white" in this country. Many things in this account, published in Europe, have caused me surprise. The following passage has excited my profound contempt: "The French Half-breeds, being intensely superstitious, and firm believers in dreams, omens and warnings, are apt disciples of the Romish faith. Completely under the influence of the priests in most repects, and observing the outward forms of their religion with great regularity, they are yet grossly immoral, often dishonest, and generally not trustworthy.

Without recalling to the authors' minds many cirumstances of which they were not ignorant, and which should have reminded them that gross immorality is not assignable only to French Half-breeds, I dare fearlessly assert that it would be difficult to find so much falsehood and error contained in so few lines as these.

Often in remarking the unjust opinions written on this subject, I have been persuaded that the Pharisees of to-day are as the Pharisees of old, and the words of our Divine Master addressed to the former, may be used to the latter: "Thou hypocrite, cast out first the beam out of thine own eye, and then shall thou see clearly to pull out the mote that is in thy brother's eye." Without going more into detail, I am happy to assert that, on the whole, the morality of French Half-breeds generally, and when they have embraced Christianity, places them on an equality with virtuous people. And, as regards superstition, if that which is said of the working classes in England be true, our Half-breeds are much less superstitious than they are.

Leaving the question of morality, if we enquire into the social condition of French Half-breeds we shall discover a weak side. From this point of view they are inferior, in the first place, for the reasons we indicated in speaking of the foreign population, and next in consequence of peculiar circumstances affecting them.

The greatest social crime of our French Half-breeds is that they are hunters. All cannot be accused of this fault, if we must thus designate a natural taste, for amongst them there are some who have never done anything else than cultivate their land. However this may be, it is certain that their life of adventure is very prejudicial to our population. Fully sensible of the fearful crisis through which we must pass when buffalo hunting fails, I cannot but hope for the cessation of these hunting excursions, which, by their natural, easy and somewhat remunerative allurements, withdraw a great number of our people from their homes. Born very often on the prairies, brought up in distant and adventurous excursions, horsemen and ready marksmen from their very infancy, it is not very surprising that the Half-breeds are passionately fond of hunting, and prefer it to the quiet, regular and monotonous life of the farmer.

In estimating them it is too common to neglect the exceptional circumstances in which they live, and to attribute to peculiarity of disposition that which is but the effect of the accidental influences to which they are subjected, and which would act in like manner upon any race of men. It is easy to convince one's self of the truth of this statement by observing the great difference there is between Half-breeds of the same origin, or even of the same family, according to the variety of circumstances affecting them.

I know Half-breeds, excellent farmers and upright men, at Red River, whose brothers, brought up in the interior of the country, are only hunters differing little from Indians of the lowest stamp. The social condition of a certain number of the English Half-breeds, similarly situated to our French Half-breeds, is in no way superior to theirs. It is the different circumstances surrounding the English Half-breeds which accounts for their different social standing, without their being superior, naturally or in character, to their brethren.

Many of the English Half-breeds, being sons of rich parents, have naturally been well educated, and have received some means which, of course, has helped them in not trusting entirely to hunting for their livelihood. I repeat, that the English population having early received a large share of civilized womens' influence, the English Half-breeds have naturally participated in the influence, and sooner acquired habits of husbandry. Let us again say to those who reflect, that the French population, and, "*a fortiori*," the French Half-breed population, were deprived almost entirely of the important influence

of civilized women until the arrival of sisters of charity in the country; for, as we have already said, there were only four French Canadian women in the country up to this period, while English women and Scotch-women were in sufficient numbers. This fact alone will account for many things, without having recourse to gross and false accusations poured forth by narrow-minded national pride or by deplorable religious fanaticism.

The death of Governor Semple and his men, killed in 1816, has been the theme of many charges brought against the French Half-breeds or "*Bois-Brûlés.*" We shall say further on, when talking of the history of the country, what we think of this deplorable event, and on whom the responsibility should rest. For the present we merely wish to shew that this event proves nothing against the character of our population, and still less against the Roman Catholic religion now professed by the majority of the "*Bois Brûlés.*" At that time not one of them had been baptized, not one of them had had the least opportunity for experiencing religious influence, and, moreover, an isolated fact can never be an index to the character of any people.

Admitting that the tragedy to which allusion is made merits all the horror with which the most violent enemies of the "*Bois Brûlés*" regard it, nothing can be deduced from it. Of what nation and of what race of men is the whole history without a blot? The French of to-day, are they to be reproached with the deeds of ancient Gaul? The proud Anglo-Saxons, found they their claims to glory in the doings of the conquerors of Britannia? Or, must they not cast a veil over a multitude, ay, a series of deeds far more hateful than the struggle of the 14th June, 1816? It is very unjust, then, to search out from the annals of the country an event which occurred in years gone by, when the Half-breeds, such as they then were, had no knowledge of Christianity, and on it to found a charge against those who have since experienced the sweet and improving influence of religion, and who now, we repeat, are a virtuous people.

In order to criticise anew, I reproduce the opinion of Sir John Richardson, given in his "Arctic Searching Expedition." At pages 273 and 284 he says: "In character the Half-breeds vary according to their paternity, the descendants of the Orkney laborers being generally steady, provident agriculturists of the Protestant faith; while the children of the Roman Catholic Canadian voyagers have

much of the levity and thoughtlessness of their fathers combined with that inability to resist temptation which is common to the two races from which they are sprung." I regret that this sentence was written by so distinguished an author.

Such unjust opinions can only be accounted for by traditional prejudice pervading a certain class and appearing in a stereotyped form in all their writings. No, no, the Half-breeds do not thus vary in character according to their paternity; and if to this cause must be attributed so powerful an influence, this would not be its effect. I willingly allow that the Orkney laborers may merit all the praise given to them; but I cannot quietly suffer the abuse and calumny lavished on others who are equally praiseworthy.

There is too much nobility in French blood that it should be thus despised; and, at the risk of finding all our detractors opposed to me, I say, and I know it to be true, that French Half-breeds are not a degenerate race.

The surroundings of my birth and my life, the direction given to my thoughts, the aspirations of my heart and mind, all that I know of my fellow-countrymen and of their children, prevent my hearing, without contradiction, that which strangers to our race—men who know us not—allow themselves to say with a view of bringing us into contempt, contempt which they themselves often do not feel.

The designs of Providence which we reverence without comprehending, have surrounded us on this continent with a network of difficulties that reasonable and reflecting men know cannot be adduced against us. The Northern Department, discovered by the energy of French Canadians, now sees the descendants of its discoverers in an inferior social condition. I confess it, but it is impossible to prove their mental inferiority.

It is true that the English Half-breeds have more land under cultivation; that they are better educated and richer, is also true; but that they are more virtuous, more sincere, more upright and moral is untrue.

I like the saying of our old *voyageurs*, and I like it the more as I know it to be true from the lips of many of them: "I am poor, but, thank God, I am honest." And that other saying of many of their children when talking about certain individuals who are not

French Half-breeds, " Well, well, these people are very troublesome. It is very terrible that they are such rascals. Were I to die for it, I could not act as they do."

We have courts of law. Small causes, debts of ten or fifteen shillings, and petty disputes, often draw our French Half-breeds into them, but every one in the colony knows that our poor people do not enjoy the exclusive privilege of entering an appearance there for felony, and cool and premeditated crime ; far from it, according to the proportion their numbers bear to the entire population. Our registers need not be searched from end to end to prove that at least two-thirds of the crimes enumerated are not committed by the despised class of our population. We have drunkards, and too many of them ; but it is known that dealing in and the consumption of spirits are not confined to those who are most vilified.

Let not these remarks be considered too sharp or too bitter, for I can fearlessly assert that I have no ill-will against any one, unless perhaps it be against calumniators. I accuse not; I defend the accused. Too long has freedom been abused by the ready pen of calumny.

The good Lafontaine, who has put more wisdom into the mouths of the brute creation than is uttered by a great many men of intelligence, has taught us, at the assembly of animals suffering from a plague, how prone we are to blame the least of errors in the poor and weak, and how we are not less prone to palliate the vices and crimes of the powerful. The lion greedily craunching with his teeth raises a hue and cry against the donkey who has merely nibbled a patch of meadow no larger than his tongue, and that, too, in a monk's meadow.

Here, we have seen the exploits of many lion cubs who, having satisfied the appetites of a heart neither pure nor just, in this country, have, when in other lands, endeavored to establish their own merit by accusing, with deplorable injustice, those to whom they had strong private reasons for being grateful.

I should regret all that I have now said were it to be considered as springing from want of consideration or respect for the other section of our population. Such is not my motive ; by choice as well as by habit, I prefer to recognize that which is good in my fellow-beings, to attempting to swell the list of weaknesses and misfortunes, ever too numerous, to which all men are liable. I willingly

acknowledge the good qualities of the English Half-breeds; but I likewise desire that their panegyrists should acknowledge the good points in our French Half-breeds; points which may differ from those of their fellow-countrymen, but which are not less numerous, or less praiseworthy.

THE INDIANS.

The name, "*Sauvages*" as used in Canada, is applied to all the aboriginal tribes of America. They are called "Indians" by the English, and are universally known as Red-skins. Without enquiring into the correctness of these different designations, it may be understood that by using the term "*Sauvages*" to denote all the Aborigines of the Northern Department, it is not intended to imply that they are all barbarous, ferocious, or savage, but that in their manner of life there is something wild, or, as opposed to the term *civilized* applied to nations practising religion, living under a form of government, obeying laws, and following arts and industry.

Only 50 years ago, the Indians of the Northern Department had no idea of Christianity, nor even of any definite and regular creed; and even now nearly all of them, Christian or Infidel, retain their original social customs.

Hunting and fishing, with very few exceptions, are their only resource and occupation. The Indian is not only migratory but roving and adventuresome. Without a house, as a rule without even a fixed abode, skin tents, (*loges*) huts of bark or of branches, or even of snow and ice, often the Almighty's great chamber, without other roof than the starry or cloudy firmament—these are the Indian's habitations, and he changes them at will.

Some families live secluded, others collect in camps, more or less extensive, according to the opportunities for fishing and hunting.

Although as a rule the Indians have no form of government, nor any code of law, in some tribes, particularly those who still carry on war, the chiefs exercise a certain authority, which is very limited, unless, at the risk of paying for their temerity, they inspire their brethren with fear. Natural superiority, greater dexterity and sometimes, too, excess of good-nature, draw a numerous family of friends around certain individuals, and here the patriarchal authority of the mature or old man is exercised with some degree of firmness.

The Indians of the Northern Department travel a great deal, more correctly it may be said that they are constantly moving. Before the establishment of the numerous factories which are now scattered all over the country, the Indians often undertook journeys of more than 3,000 miles to barter furs with European and Canadian traders. The factories are now so generally distributed that it is no longer necessary to travel so far for the purpose of bartering, nevertheless the Indians still make their journeys. The light bark canoes, following the course of streams and numerous lakes, facilitate their wanderings through forest-covered districts. The Indians of the prairies have horses, and use them in crossing the vast plains. In winter, dogs take the place of canoes, and at all seasons they assist the horses in transporting goods and provisions.

Indians, particularly those of the prairie, adopt a curious plan in availing themselves of horses and dogs for draught purposes: Ends of two long poles are crossed on the back of the animal, and retained in their position by straps, which take the place of harness. The other ends, spreading out more or less according to the length of the poles, trail on the ground, icy or otherwise. The baggage is placed upon straps or buffalo skin fastened across between the trailing ends of the poles. This means of carriage is used for sick or weakly members of a family, and gentlemen who have tried it, have assured me that the jolting is as easy as that of the best hung carriages.

Indians are not rich. Often, without any assistance from the husband, the wife can carry all the belongings of the family on her back. Money wealth is unknown—for throughout the extent of the Northern Department, with the exception of Red River Settlement, coin does not pass current—its value and use are unknown to Indians. Furs and provisions, the produce of hunting and fishing, are their riches, and these they barter for clothing and English and American implements which, with the addition of horses for prairie Indians, and dogs for all classes, include all their property. Amongst the Indians, absence of wealth is associated with extreme poverty. Whole tribes are constantly in a state of semi-starvation and daily suffering; and every one of the tribes, at one time or another, lacks the very necessaries of life. It is wonderful, too, to see to what extent these poor creatures can support privation. To be for three or four days without any food, appears to them quite a matter

of course. Very often these extreme privations continue for seven or eight days at a time.

Add to this, semi-nudity in the midst of the rigors of our frightful climate, and a faint idea may be obtained of the physical trials of these poor people. I said that the wife occasionally carries all the belongings of the family on her back. This indicates the position of women amongst the Indians. I speak of infidel Indians, for the condition of Christian Indians is much improved. The former reap, in all their bitterness, the fruit of the curse pronounced against the mother of man: the latter find consolation in their misfortune, from the benediction bestowed upon them through the intervention of the Mother of Christians. It is said that the Esquimaux and Loncheux treat their women with a little more humanity than other Indians. I have never seen these tribes, but all I have seen of infidel tribes, obliges me to regard the Indian woman as the most unfortunate being that can be imagined. The miserable creature is not only the porter of the family, but she is literally its beast of burden. All drudgery is hers, and hardly ever is she allowed the slightest relaxation. Her condition is rendered still more painful by cruel treatment, the profoundest contempt, and the demeaning position in which she is kept. How often my heart has been wounded on seeing their wretched misery! How I have blessed and thanked the Good God, who amongst other divine favors has placed our mothers in the position they occupy among civilized Christians! How ignorant and foolish were those, who, in order to speak irreverently of regenerating religion, dwelt on the imaginary well-being of a primitive people in the forests of America! How far from the sad reality are these Utopian ideas, these dreams of wild imagination, or of depraved hearts! I have spent more than half my life in these lands, and, notwithstanding that I have been the constant witness of misery—misery which I have sometimes shared with its victims—I still ask myself the question, How can Indians thus suffer and live?

In Europe particularly, where Indians are never seen, very odd ideas are formed about them. To do away with all these false impressions in two words, suffice it to say that Indians are men. This statement, apparently so simple, nevertheless describes these unfortunate races much more accurately than do all the fancies of those who speak of them without acquaintance.

The Indian is a man, in the first place, in physique, very often, indeed, a fine type, with the exception of slightly too prominent cheekbones, too dark or coppery a complexion, and want of beard. Many Indians are very fine men. Their height is much above the average, particularly when compared with the inhabitants of Southern Europe. I have seen a crowd of Europeans and Canadians quite as dark as Indians who have not been very much exposed to inclemency of weather. All the Indians I have seen, have black eyes, and this organ, like that of hearing, acquires great keenness from constant use. I have never had proof of what I have read about the delicacy of their sense of smelling. The black eye of the Indian is often full of life, intelligence, and malice, in others, it has the calm of kindliness, or the blank expression of indifference. The Indian is well proportioned ; if, from want of use, his muscles are not well developed, exercise makes amends to him by making him extremely active and endowing him with surprising power of resistance to the fatigues to which he is exposed. The Indian is an eating, drinking, sleeping, walking man. He eats enormously when he has wherewith to satisfy his appetite just as he does without food when necessary; he drinks very often to excess, particularly of "fire-water." Many civilized people, especially from cold countries, know very well that this disposition is characteristic of humanity. This wild man, like other lazy people, sleeps during the day and night, when he has nothing else to occupy him; but he also watches for longer periods than any others that I know of. He walks—this biped—with legs slightly bent, and with toes turned inward from habit, and he travels like a veritable hunting dog. He runs, too, and this at such a speed as to overtake deer on the plains, and in the forest. The Indian is a man, for he is born amid weeping, he grows up amongst tears or dreams; and he occasionally grows old when excessive privation has not broken down, before its time, a constitution endowed by nature with all that is necessary to insure longevity. Subject this Indian to the numerous influences that affect civilized nations, let him accept the refined aid of tailor, perfumer and hairdresser, and you will have a fashionable gentleman, often more graceful than the majority of those who most avail themselves of the distinguished title. So much for the physical man.

I say again the Indian is a man, a man of intelligence, and while I say so, I fancy I seea contemptuous smile passing over the lips of some; but I believe I have good reasons for the statement. The Indian is a man of intelligence, and in proof of it, I refer to the language he speaks, the thoughts which occupy his mind, and the sentiments which animate him. Each tribe talks a different language from any European—different, with the exception of Esquimaux, perhaps from Asiatic or African idiom—different even from the language talked by other American tribes. Each of the races, even each of the tribes of Indians in the Northern Department, uses a distinct dialect, as distinct one from the other, as French is from Chinese, or English from Hindostanee.

The dialects are not inarticulate sounds, as some have unhesitatingly asserted; they are not mutilated, unintelligible, meaningless fragments; no, on the contrary, they are true lauguage, expressive of all the ideas which occur to the mind, and all the feelings of those who speak them. Their idioms convey to you, strangers who understand their speech, all that fills the minds of these poor children of the forest, whom you probably decline to acknowledge as fellow-beings; equally well do they express all that you could desire to say to them.

And these different languages, who has made them? Who has preserved them? To whom is it due that whole tribes speak them with greater perfection than civilized nations do their own languages?

Without grammar, without dictionary, and without any kind of written document, the father repeats to his child the accents which he caught from the lips of his own parent, and the little infant, knowing only how to cry, begins by picking up a few syllables and lisping out Pa! Ma! then it provokes the affectionate mirth of the family with an imperfectly articulated sentence; mastering this it passes on to another and another, until matured intelligence completes the task, that the pupil may in turn transmit his learning to his own offspring.

The Indian is an intelligent man. His mind, whatever its grasp, usually concerns itself only with that which is of immediate interest—food and excitement. What grand and noble intellects have been hidden in the shade of obscure existence, while, thanks to fortune, mediocrity has soared aloft! Is it surprising that

differences, so frequently observable between men of a nation, between even members of a family, should be found to exist between races of men.

The compass of the poor Indian's knowledge is certainly very limited, but it is not to be expected that his intelligence should be exercised in an extended sphere ; yet, watching his struggles in his contracted sphere, is sufficient to convince one that he, too, is an intelligent being.

The Indian sees, examines, compares, judges, modifies, remembers, foresees, learns and forgets. Idiocy amongst Indians, is rare ; wit is common. He jokes, laughs, and amuses himself at the expense of others, not in the manner of quadrumanous monkeys, but like the most sly of biped monkeys. A certain Protestant clergyman was once in the midst of a tribe little inclined to listen to his teaching. The orator perceiving that his exhortations made but little impression, had recourse to theatrical device. Seizing his watch he held it up before the Indians and called on them to admire its mechanism, and from it to conclude the superiority of civilized men over those who were listening to him, all so unskilfully as to wound susceptibility and pride, as sensitive in Indians as in other descendants from Adam. After a moment of silence, during which the speaker glanced contemptuously around on those whom he imagined he had convinced of his superiority, the Chief replied, " True, true. You civilized people are men of wisdom ; we are brutes. But you, sir, shew us your artificial sun. Did you make it ?"

" No," replied the interlocutor.

" Ha ! ha ! you did not make it and yet you shew it to us in proof of your mental superiority ! I am a brute ; but listen to me ; I won't talk long, because you appear to despise us too much. Here are my bow and arrows, I made them myself ; here is my gun which, like your artificial sun, was made in your own country. You people are wise, you know how to do everything, and you ought at least to be able to use the gun ; take it, and this powder ; I shall take the bow and arrows. Let us both start for the woods, and return at the next moon, you can then let us know if you are cleverer than we are."

This argument, although not strictly logical, was sufficient, as may easily be imagined, to call forth a roar of laughter from the whole assembly ,and to throw the unskilful speaker into confu-

sion, as he knew well that, if Indians have much to learn from civilized people, they have also much in their manner of life that may be instructive to the latter.

The man of the wilderness—so ignorant, and without an instructor, learns with great quickness from the first master presenting himself. We have books written in syllablic characters. I know an Indian who learned to read them in one day, and many have done as much in three days. I have lived amongst Indians for a quarter of a century, and I have always considered that they are as intelligent as the uneducated of the most intellectual of races. But, it may be asked, if the Red-skins are so intelligent how do you account for their condition? How is it that, in our day especially, in the midst of light which by its brilliancy would, as it were, blind other people, they know so little? We have railroads, they travel on snowshoes; we have submarine telegraphs, they have not even an idea of a post-office; we have rifled guns, needle guns or *chassepots*; we can shoot to enormous distances, and they still retain the primitive weapons of their forefathers; they have only spears, quivers, bows and arrows, and can only shoot to short distances; and we have armor plated vessels while they have only bark canoes; we read all the secrets of the visible heavens, while they recognize only a few of the constellations; we reckon the ages of all the strata of the earth, and their knowledge is limited to an acquaintance with the animals inhabiting it. In short, we are the great and powerful nations of the age, and they are only the poor and ignorant Indians of the forest and plain. How is this? The reply to this important and serious question is, certainly, one of the Almighty's secrets. But does not the all good God, in this, appear to desire to teach us a useful lesson by shewing us the limited character of the human mind when left to itself? The Indian races are, like the other races, quickened with the breath of life which made the descendants of Adam intelligent beings. Their intelligence, if you will, is, as it were, in a latent state, and allows centuries to pass without brightening those who possess it, and light to shine elsewhere without rescuing this unhappy people from the deep rut into which they have fallen, or leading them back to the point whence they started. Therefore, the human mind, left to itself, is powerless and unfertile; and, therefore, it will not suffice you, O fool! who would reject the Omniscient.

The Indian is a man, and there is proof of it in his moral character. His intellect, administered to by his senses, too often subjects itself to their tyrannic rule—of which, too, it sometimes knows how to free itself.

The Indian, like the civilized man, raises himself above the power of his senses, when, embracing Christianity, he accepts that sublime philosophy so embarrassing to professors of free-will. How sweet, how consoling, to observe the submission of the yet untamed Indian bowing to the authority of the Gospel!

Yes, the Indian is a man who finds in divine teaching wherewith to enlighten his mind, until now so clouded,—and in heavenly precept, wherewith to fill the void in his heart! How often I have been deeply affected, what grateful tears I have shed when watching the working of Divine grace on these unhappy orphans of fortune while it prepared them for felicity! Yes, the Indian is a man, a man capable of subjecting himself to his intellect, and capable of experiencing Divine influence. If the moral character which can convert the Indian to Christianity, is not sufficient proof of humanity, O you who do not fear to reject Divine teaching, consider the infidel Indian, and his degradation will convince you that he is of the same species as those who spurn him—man like all those who ignore God, or deny Him, like all those who will not accept either the Gospel, or its morality—man like all slaves of sensuality and worldliness—man like all vain boasters, murderers, and thieves. Oh yes! the Red-skin shews that he is human like the infidel white man.

The Indians of the Northern Department, even before the arrival of missionaries amongst them, were possessed of some religious ideas, at least some biblical traditions, easily recognized, interwoven with the gross follies and superstitions which encompass them. All Indians acknowledge some Being superior to others, to which they give various names. Some of them render the greatest homage to the sun; others, while recognizing "the Good Spirit," prefer to worship and honor the Evil. Nearly all profess a kind of gross polytheism, calling on all the powers of nature, more particularly supplicating those of unusual and striking appearance. Infamous and absurd superstitions captivate the poor people, and often hinder their conversion. Jugglers and sorcerers, who are usually their "*medicine men*," pretend to possess supernatural

strength and power, by which they exercise a great ascendancy over their fellow-men; and, as they thus find a certain means of gratifying their sordid passions, they are interested in preserving the practice of their art, and in opposing all that, by lessening their influence, would operate to their disadvantage.

As regards the importance to be attributed to their jugglery, I find it not only very difficult to express an opinion, but even to form a definite idea on the subject. Doubtless, as a rule, their art is but dexterous deceit; at other times, I should be tempted to believe in the agency of evil spirits. Generally, the sorcerers or "medicine men" are by far the worst in the community, and the evil spirit, if God suffers him, would find it serve his purpose to make use of them. I have never been able to witness their magic. My justifiable curiosity has been excited by descriptions of their doings, and also, I must acknowledge, by the character of the serious and intelligent men who said they had been eye-witnesses of their wonders. Often I have requested to be shewn the sorcerers, feats, and the performers have declined to comply—they themselves asserting that they had no longer any power in the presence of "the man of prayer," or even before a sacred object, such as "the Book of Holy Writ," a cross, chaplet, &c.

From whom are the Indians descended? I have just said that they are men, therefore, they are descended from Adam. I add, Noah was their ancestor, and Shem their progenitor—for the Redskin or American is connected with the Mongolian race, from which he differs less than do the descendants of the three sons of Noah, one from the other.

The possibility of America having been peopled from Asia, or even from Northern Europe, is no longer doubtful. Its simplicity is universally recognized, even supposing that travellers in those days may not have had the facilities they now have. But this supposition is improbable, and for my part I am convinced that Indians were formerly more civilized than they now are; that they have degenerated through forgetting the traditions which bound them to God, just as they will recover their position by accepting the teaching which brings them nearer to their Maker and their destiny; moreover, their condition serves as a warning to those who would weaken, and then subvert the precepts of the Divine Saviour.

What would become of humanity were it to adopt atheism; were it to profess materialism? It would become Indian, and Indian of the worst kind. How guilty those are who, by direct means, attempt to lead it to these monstrosities, although they call them by a less offensive name. The poor Indian has never been so senseless as to deny the existence of a Supreme Being; he has never been so foolishly wicked as to claim a standing amongst the brute creation, and yet, by retaining only vague and indefinite ideas, he has descended to the very brinks of these two abysses. What would be the result, undreaded by some, of going down into these fearful depths?

When was America first peopled? An answer to this question would be extremely interesting, but I am sure it will not be discovered here, and I even think that it will never be found. Our Indians of the Northern Department, have no chronicles, no annals, no written monuments, nor record of any kind whatever. They do not know even their own or their children's ages, or did not until our arrival amongst them.

Their traditions appear to be accurate only when they refer no further back than to the time of the speaker's grandsires; so that it is easy to understand how difficult archeological research is. Chronology, so difficult to establish in the case of partially civilized people, is quite vain and impossible here; we shall, therefore, not make the least attempt in this direction.

Having given the foregoing brief sketch of Indians in general, it appears a natural arrangement to describe them in detail.

There are five distinct families of Indians in the Northern Department, the distinction being specially marked by variety of language. The idiom of any one of them has not the least resemblance to the idiom of any other: other points of difference characterize these five families and help to distinguish them, just as resemblance of language makes us class in one group tribes which, from other points of view, might appear distinct.

The five families are as follows:—

1. Algonquins.
2. Assiniboines or Stonies.
3. Blackfeet.
4. Chipewyans.
5. Esquimaux.

THE ALGONQUINS.

We give the name "Algonquins" to the various nations or tribes whose dialect is so closely allied to that of the Canadian Algonquins, that it is impossible not to attribute them to a common origin.

The Algonquins occupy, to the exclusion of all others, the districts of Norway House, Rainy Lake, Red River and Cumberland House, and they are found, as a majority, in the Saskatchewan and Swan River districts. The Esquimaux of Melville Peninsula alone dispute their undivided possession of York District. Algonquins are also numerous in English River District. Some isolated families have penetrated as far as Athabaska: so that Mackenzie River District is the only one entirely free from Algonquins. If to this enormous extent of country is added that occupied by branches of the Algonquin family in Canada, it may easily be credited that this group of Indians is one of the most widely scattered in North America.

In the Northern Department there are not more than 30,000 Algonquins.

Tradition tells us that formerly they were much more numerous. War, famine, and particularly frightful mortality from small-pox, have reduced their number. My own observations since I have been in the country, persuade me that their numbers do not vary.

The Algonquins are here composed of three tribes:

The Saulteaux or Chippeways.
The Maskegons or Swampies.
The Crees.

The Saulteaux, in the Northern Department, occupy a belt 3° or 4° in breadth to the north of the 49th parallel of latitude, and extend from the west of Canada to the eastern part of the Saskatchewan District.

The Maskegons inhabit the country to the north of the Saulteaux, as far as Hudson's Bay.

The Crees, who in all respects appear to be intermediate between the Saulteaux and Maskegons, generally occupy the country extending between the two sister tribes, up to the Rocky Mountains. This belt has an average breadth of 58°.

The Saulteaux are a high spirited, proud and excessively superstitious people, and, in consequence, difficult to tame. Of all our

Indians, these have had the greatest facilities for learning the truths of religion, and they, too, have least profited by their opportunities, and count fewest Christians amongst their numbers.

This fact is the more surprising, as they should naturally experience a salutary influence from their Canadian brothers who are all Christians. Even at Red River, and surrounded by churches and the means of salvation, the majority of the Saulteaux remain infidels; they waste their indolent and miserable lives in their wretched bark hovels, and retain all their primitive habits. They tattoo themselves, and give themselves up to their ridiculous and, often, cruel superstitions, just as if their folly had never been pointed out to them. On the other hand, those who, at a mature age, embrace religion, attach themselves to their faith with great constancy and firmness: unfortunately, many children, baptised under exceptional circumstances, have had to live with or return to their infidel relations.

The Saulteaux are generally fine men; nearly all have a very great liking for intoxicating drink, which is one of the causes of their callousness. War songs still exist there, and often in the midst of starvation, and privation they undertake journeys of several hundred miles on foot to surprise and scalp an enemy who is generally defenceless and return triumphantly to perform the war dance, and to shout the hideous scalping song. I cannot understand why the Red River Colony submits to be a witness of these horrors; the entire absence of a regular force can alone account for this too tolerant submission. Those of the Saulteaux who have been brought up amongst our Half-breeds, and there are a few such, do not appear to partake of their fellows' disposition; and this proves that all their bad traits are the result rather of circumstances and the influence of their education than of natural disposition. There now lives with me a young Saulteaux, twenty years of age, who embraced Christianity three years ago, and his conduct leaves nothing to be desired.

The Saulteaux are passionately fond of colored glass beads, and other glassware of the kind. They load themselves with necklaces, and pierce their ears to attach long strings of ornaments as ridiculous as they are cumbersome, large rings, thick chains, old watch and clock wheels, shapeless pieces of copper, tin, &c.; and their poor ears are not unlike the dirty shop of a ruined goldsmith. The weight stretches their ears to a size that more than one fashionable man would fail to envy; while the metal appendage which completes

its bulk merits its Chipewyan name "*Betzarenetchay*" (*i.e.* large ears). To complete the toilet, add a large piece of tin made fast to the nostrils, long and dirty tresses, strips of cloth, fur and a great collection of feathers on the head, and you will have an idea of the display of vain pretension characteristic of the Saulteaux. The spectacle being constantly before my eyes, I may well be pardoned for the possibly too severe criticisms I have passed upon the head ornaments, which, were they in better taste, would not the less owe their origin to the motive that induces the Indian to burden himself with useless and unsightly encumbrances.

The Saulteaux derive their name from Sault Ste. Marie, which separates Lake Superior from Lake Huron, and whence they originally came. Many authors describe them under the name of Chippeways, which is perhaps a form of the word Ojibway, the name of a tribe of Saulteaux living in the neighborhood of Red Lake. The Crees call them "Nakaivéiniwih," while the unassuming Saulteaux call themselves "Anichinebewok" or " Men" ! Could one ever have imagined that these braves had so much pretension to being the superior race, as to consider themselves the only representatives of humanity ?

The Maskegons or Swampy Indians. Maskegon is a corruption of the word Omaskekowah, men of the swamp. Maskey (*i. e.*, swamp) is the root of the name of the tribe about which we would now discuss ; they live on the shores of Hudson's Bay, and in the neighborhood of the group of lakes which collect the water of the great rivers flowing into the bay. Their name is derived from the swampy character of the district which they inhabit. The name " Swampy" is an etymological and literal translation of *Omaskékowah.*

The Swampies, like their neighbors and brother Algonquins, the Saulteaux, have a very distinct character. They are gentle, averse to bloodshed, easy to influence, and less superstitious. The neighborhood of the principal factories has greatly modified their color and nature. The anecdotes of travellers induce a natural belief that this circumstance has not produced a favorable effect upon their habits.

The English and Methodist churches have some missions amongst the Swampies, of whom very many willingly receive the teaching offered to them.

Besides hunting and fishing, the Swampies find an abundant

resource in boating between York and Jack River, being employed to transport goods. Whether these exceptional circumstances influence the character of the Swampies, or that their character is different from that of other tribes, it is certain that they are more easily induced to settle down, to build houses and to cultivate land. In the neighborhood of Norway House is seen Rossville Village, and the mouth of Red River has its Indian Settlement of Swampies. In this settlement there are a few of all the races, but the Swampies, from different parts of the country, greatly predominate.

THE CREES.

These Indians, called Crees in English, are known as "Kinistenovoh" by the Blackfeet, and speak of themselves as "Neyowock," or "Iyinuvoh, *i. e.*, "Men." Recognizing their modesty, it may be seen that they are a branch of the Algonquins. They appear to hold a middle place between the proud and untameable Saulteaux, and the gentle and peaceful Swampy. As if to render this double likeness more perfect, the Crees consist of two tribes: the Plain Crees—warriors and living in camps, and the Forest Crees, humble hunters and fishermen leading an isolated life. These two tribes speak one language, very different from that spoken by the Saulteaux, but sufficiently analagous to prove the identity of their origin, and to enable them to understand one another at once, at any rate in some degree. Cree is a beautiful and rich language, and probably the easiest of all Indian languages. The Plain Crees speak with purity and even grace. The Forest Crees, by the introduction of some Swampy, lose a little of the purity. In some localities there are families who have adopted words and consonants not to be found in pure Cree. The letter R, for example, is not to be found in the Cree alphabet, and yet the Crees of Athabaska use its rougher sound instead of the soft Y.

Here is a table showing different forms of the personal pronoun as expressed by the various branches of the Algonquin family in the Northern Department.

English	*Me.*	*Thee.*	*Him.*
Saulteaux	Neen	Keen	Ween
Swampy	Neena	Keena	Weena
Crees, proper	Neeya	Keera	Weera
Athabaska Crees	Neera	Keera	Weera
Ile à la Crosse Crees	Neela	Keela	Weela
Nearly all Forest Crees	Neetha	Keetha	Weet

There are a great number of words of which the inflections are thus regular, so that when one has found the key, the difficulty of mastering the language disappears.

The Crees of the plains live in somewhat extensive camps, generally with a view to buffalo hunting.

They are at war with their neighbors, the Blackfeet Indians.

The Forest Crees, on the contrary, and with reason, consider it wiser and safer not to expose themselves to be slaughtered. Their greatest enjoyment is to hold feasts, and to invite all the world to join them. They make use of dogs' flesh on grand occasions. Their improvidence and wastefulness are extreme. They suffer privation even under circumstances in which other Indians, as the Montagnais, would provide themselves with abundant supplies.

The Crees of the plains live in "loges," or leathern tents, while the Forest Crees often content themselves, as do the Swampies and Saulteaux, with birch bark huts, lighter to transport and not less comfortable, if comfort is to be found at all in an Indian loge.

The Crees are somewhat less superstitious than the Saulteaux, and their conversion is easier.

Like the Saulteaux and Swampies, when unconverted they are revoltingly sensual.

II. THE ASSINIBOINES OR STONIES.

The Assiniboines are the second family of Indians in the Northern Department. A branch of the formidable race of Sioux, whose language they speak, they are nevertheless their implacable enemies.

The Sioux are called by Saulteaux, their next neighbors to the north and their traditional enemies, "Pwan," or in the plural Pwannah, from the Saulteaux word pwan, called Apalath (*i. e.*, roast meat) by our *voyageurs*.

The origin of the name is probably to be found in the horrible custom, still practised by some Saulteaux, of roasting and eating the Sioux they kill in battle.

The Saulteaux word has been adopted by the Crees, who have slightly altered it into Pwatah, and from this is derived Assinipwatak—Sioux of the rocks (*Assini*)—or mountain Sioux. Frenchified into *Assinipoël's*, the name was applied to the tribe by the first

discoverers of the country, and afterwards it was altered into *Assiniboins*, the form now generally adopted. Englishmen also use the name Assiniboines, but they call this tribe of Sioux *Stonies*.

The Assiniboines, like the Crees, are subdivided into two tribes, the Assiniboines of the plains, and the Assiniboines of the forest.

The latter are a good and gentle people, but excessively poor. On their wretched bodies they carry the marks of the extreme and constant misery in which they live. The Assiniboines of the plains, on the contrary, are large and active, merry fellows, and unconstrained knaves, hence the proverbial expression, "Thief, like an Assiniboine."

They join with the Saulteaux to fight the Sioux, and with the Crees of the plains to pursue the Blackfeet.

The barbarity of the Indian is too well known to be described here. A little research, unfortunately, proves that similar barbarities are to be found in the histories of most civilized people, so true is it that nothing resembles one man so much as another man.

Without being as poor as their brothers of the forest, the Assiniboines of the plains have the knack, in spite of their plundering, of being always the most destitute of all Indians who live by buffalo hunting, and the extent to which they accustom themselves to hardships is difficult to be believed, or even imagined. It is no unusual sight, in the depth of winter frosts, and in the midst of violent storms, to see an Assiniboine riding without any other covering for his naked bust, than a buffalo skin thrown over his shoulders without any tie, while the rest of his clothing is in perfect keeping with this; having spent many years in the Indian country, and having frequently experienced the severity of our climate, I still ask myself, "How is it that all these Indians do not perish?"

The Assiniboines were certainly united with the Sioux in former times; having subsequently been forced to withdraw themselves to the lands of the Algonquins of the west, and there they mingled with the different tribes of that family, occupying a narrow diagonal strip of country stretching from Mouse River, (*rivière à la Souris*) to the upper part of Athabaska River. The Forest Assiniboines frequent Lake St. Anne mission. Further to the south, the Methodists have a mission on Pigeon Lake.

Superstition and love for thieving are such amongst the Assini-

boines of the plains that some of them actually cut off finger joints to increase their success in plundering.

As, in talking of Red River, there was frequent reference made to the Sioux, it will be considered surprising that in enumerating the Indians of the Northern Department, I barely alluded to this fierce and cruel tribe. The reason is simply that Sioux do not live in British territory. Formerly a tribe of this people, known as "Canoe Sioux," made an expedition into our country; it was one of these who murdered Father Armand, junior, of Vérandrye and his men. Except as visitors, Sioux have not come amongst us for many a day. The frightful massacre committed by these unfortunate people in Minnesota, in 1862, led to their flight before the just punishment which the Americans had in store for them. It was then that, from time to time, bands of these Indians, taking advantage of international law, came into the colony of Assiniboina, where it became necessary to supply them with food to prevent them from starving to death. However, these cruel assassins are not of our people; we have sufficient misery and responsibility without attending to them. Their own history, and the principle deeds of their brothers, the Assiniboines, do not inspire us with a strong desire to claim them. We have enough of the Assiniboines, who, as we indicated above, occupy Swan and Saskatchewan districts in numbers amounting to 3000 or 4000.

III. THE BLACKFEET.

To the west of the Crees of the plains, and to the south of the Saskatchewan, in the district of that name, the third family of Indians in the Northern Department, the Blackfeet, are found.

Like all Indians of the plains, they live in large camps, and their only resource is hunting buffalo and other game to be found on the prairie. When hunting is successful, they gorge themselves; when it fails, they pine away, and often die of starvation. I have had no opportunity for studying the Blackfeet, but report gives them a noble character, noble, no doubt, according to an Indian standard, nevertheless somewhat better than their neighbors.

An English gentleman, who had spent several years amongst the Blackfeet, on one occasion appeared to be much astonished because I did not take an interest in them, while he went on to express his

admiration of them in the following exaggerated language :—" The Blackfeet are to other Indians, what the English are to other people." I bowed to express the high sense I had of his opinion, and leave others to criticise as suits their fancy.

As warriors, the Blackfeet are celebrated and dreaded, even beyond the Rocky Mountains. In their almost continual war with the Crees, they are not generally accused of being the first to break the treaties of peace made from time to time.

They are wealthier than their neighbors, particularly in the possession of horses. This draws the latter into expeditions, having for object—at least as a secondary motive—to procure steeds, which they sometimes capture in numerous droves.

The Blackfeet also live in skin tents. Their loges are more roomy, and better made than those of other Indians.

In times of abundance, there reigns amongst them a certain luxuriousness ; luxury of hair and hide !

The Blackfeet are less slovenly than other nomadic tribes. Their clothing, although made of leather, is sometimes rich and elegant; they display even refined taste in ornamenting their clothing. The quills of porcupines, the hair of moose and horses, and particularly the locks of their enemies, supply them with means of ornamenting in a style far superior to what expert artists might think possible with such means.

As the Crees attack the Blackfeet on account of their horses, so with similar object—theft and pillage—the Blackfeet make raids even on to American territory, as well as beyond the Rocky Mountains. They are dreaded, too, by all their neighbors.

Let us hope that the efforts initiated, a few years ago, for their conversion, and already crowned with some success, will ultimately regenerate this people, and put an end to their wars that may otherwise exterminate the tribe.

Blackfeet, little tender about that regarding which a man of feeling is most sensitive, are nevertheless extremely jealous ; very many of their women bear strong marks of the jealous rage of their pitiless masters. The nose of the woman is the point of attack, and many of their faces are shorn of this important organ. A slash of the knife, or a snap of the teeth, has sufficed for the operation. How noble is Indian nobility !

The Blackfeet number about 6,000, but are decreasing in con-

sequence of war and the ravages of contagious diseases, to which they are more liable than others from the greater unhealthiness of their climate.

The Crees call the Blackfeet by the generic name Ayatsüyniwok (*foreigners, enemies*). The Montagnais call them Ennasslini, (*wicked Crees or wicked foreigners*).

The family of the Blackfeet is subdivided into three tribes: first the Sixika, or Blackfeet, properly so called, then the Piéganew, and lastly the Bloods or Kena.

These three tribes speak the same language, unite for war, have identical manners and customs, and yet are quite distinct. This whole group of Indians is very revengeful. Retaliation may be delayed, but is seldom forgotten.

Without a regular form of government, the Blackfeet have a better defined military organization than other children of the prairie. They have seven classes of soldiers, each commanded by a leader, upon whom devolves a share of the organization of the camp and of the maintenance of order.

The tribe is characterized by sun worship, a public and solemn ceremony, especially marked by a fête occurring in the beginning of August, and in which the whole tribe takes part. This fête appears to point to a closer alliance with known races. The worship of the orb of the day, natural enough to man deprived of revelation, has its high priests, its vestals, its improvised temples, its sacred fire, and its burlesque and profane exultation. The ceremonial of the fête is very complicated; sacrifice is an essential part of it; some fanatics immolate portions of their own bodies, cutting off their fingers with this object. Vocal and instrumental music increase the excitement if not the fervor. And what *virtuosi* are these savage howlers of the prairies! The grossest and most absurd superstitions, embellished by the haughty swaggering of chiefs, captivate this people, who readily submit to the authority of a custom or a creed of which they know neither the object nor the origin.

The festival of the natural sun, and the reverence paid to this brilliant manifestation of the Sun of Justice, have led some of those who have described the Blackfeet into error, by inducing them to conclude that the tribe did not recognize a Supreme Being. But these Indians, like others, have an undefined idea of divinity and of the superiority of an invisible Being. The word God cannot be

translated literally into their language, but divinity and its attributes may be described in it. For example, they say "Ispouinitapi" (He who is on high) and "Kminou" (Our God.) This superior invisible Being, whom they naturally suppose to be above in heaven, is certainly the God whose infinite goodness they declare in addressing Him by the same title as the Son of the Eternal has put on our lips in teaching us to pray.

The Sarcis, a fourth tribe, not of the Blackfeet family, is connected with them.

The Sarcis, as regards manners and customs, are exactly like the Blackfeet, but speak a different language. By language, the Sarcis are connected with the Castors who live on the banks of Peace River, and are a branch of the Chipewyans or Montagnais, to whom we shall presently refer.

The Sarcis have lost all the gentleness, peacefulness, and honesty that characterizes the family to which they belong, and instead have become imbued with the spirit of revenge and inclination to thieve which characterize the tribe to which they have now allied themselves. This shifting of a tribe, which war threatens with extermination, is very similar to what has happened in the case of the Assiniboines. These have not only abandoned their brothers or natural allies, the Sioux, but are actually at desperate war with them, and have vowed implacable hatred towards them.

The separation of the Sarcis led to their migrating towards the south. The separation of the Assiniboines drove them towards the north, or the north-west.

Before leaving the Blackfeet let us say that, contrary to the custom prevailing amongst other Indians of the Northern Department, they do not inter their dead. They dress the body with care, place it in the loge, and at the door sacrifice horses, particularly if the deceased was a chief, that his spirit may hunt at leisure in the other world. Where the body has laid is presently pasturage for deer.

IV. CHIPEWYANS OR MONTAGNAIS.

On quitting the prairies and the tribes inhabiting them, scenes of bloodshed, theft and brigandage disappear, and now we enter more peaceful regions, and find a different people from those we

have been considering. The Chipewyan or Montagnais family are in striking contrast to those they call "Grandes Oreilles" (Saulteaux), the Wicked Strangers (Blackfeet), &c.

The names given to the Indian family about which we now wish to speak, cause them to be confounded with others with whom they are unconnected. Thus the name "Montagnais" has led to the supposition that these Montagnais of the north are related to the Montagnais who live on the lower St. Lawrence and on the banks of the Saguenay. The latter are related to the Algonquin family, whose language they speak, while the Montagnais of the north are a distinct race. Gentleness of character undoubtedly greatly assimilates the two Montagnais, and it is this point of similarity which has probably led to the name Montagnais being applied to the tribe in the North-west. Travellers, who had first seen the Montagnais of Canada without understanding their language, and afterwards came amongst those of the north whom they understood no better, might easily conclude that the two were one family. The name Chipewyan is also sometimes mistaken for Chippeway or Ogibiway, which the English invariably use in speaking of the Saulteaux.

The name Tchippewyan, in the plural Tchippeweyanak, as written in Cree, is derived from the two roots, Tchipwan (pointed), and Weyan, (skin, blanket or clothing), and was applied by the Crees to the Montagnais, who formerly wore pointed clothing, as the Loucheux and Esquimaux now do. The pointed form of Montagnais canoes may also have had something to do with the name, as, with elision, the name would express this form of boat.

Whatever may be the case about these two names, confounded by many, the Dene family (or Men) bearing them, differ considerably from the other tribes about which I have spoken. Their dialects are not at all analogous, and their habits differ as much as their language. The Montagnais are gentle, timid, and more indolent than the other Indians. Although hidden in the recesses of dense forests which serve to protect them, they are always fancying that they are being pursued by their enemies, "the Wicked Strangers" (Eunasline.) Up to the arrival of our missionaries amongst them, they were frequently seized with absurd fear and panic, and ran until they were out of breath, or plied their paddles with redoubled vigor, and this even when there were many of them together at the time.

A girl once fancying she had heard the click of a gun-lock, ran in fright to warn the family, or the camp; and immediately, without any other sign, the whole band of doughty knights took to their heels.

These causeless panics were doubtless caused by the recollection of former wars with the neighboring tribes. If they were then brave soldiers, they have very much changed; at present, at all events, the Montagnais are not imbued with warlike spirit. The Crees, their enemies of former days, but now their friends, say of them that they were brave when once engaged. This opinion places their courage really on a par with the courage of many who are acknowledged to be brave.

The Montagnais fear not only the living but the dead. When any one dies they fire a great many shots to calm the exasperated departed spirit, hasten to place the corpse in the grave, and immediately move away to avoid as much as possible the neighborhood which they now consider fatal.

I was once travelling with two infidel Montagnais. Bad weather obliged us to stay for a whole day near a burying place. At midday, one of my companions was attacked with burning fever, his face swelled up, his pulse throbbed violently, and his breathing was difficult; he sighed, puffed, and fretted. I thought him very ill, and he really was so. Next day we continued our journey; I changed places with the patient; I packed him warmly in a blanket in the middle of the canoe, and taking the paddle I rowed as hard as I could to hasten our arrival at the next habitation on our road. We had hardly pushed off from the bank when I observed that the patient's breathing was easier, and his nervousness less; presently he asked for food. A few hours later he had perfectly recovered and told me that fear of the dead had been the sole cause of his illness.

On the death of near relatives, the Montagnais give themselves up to extravagant grief; they cry, even howl, and used to burn and destroy all they possessed. Covered with miserable rags, whose possession they owe to charity, they lived a whole year without hunting, trusting for food to the pity excited by their wretched condition. Exaggerated dread of death is also observable in this tribe.

It is unnecessary to say that this excessive fear, and the customs noted above, ceased with the introduction of Christian teaching,

which in this and many other ways has much ameliorated the characters of these unfortunate people.

The Montagnais have a great horror of blood, and don't understand any other kind of fighting than pulling one another by the hair. They are, however, far from tender-hearted. The Montagnais do not give themselves to bloody deeds; but, before they became Christians, they were so unfeeling that they abandoned their relations, without help in the midst of the forest, when age or infirmity incapacitated them from following the family. Other tribes kill their old and infirm people, the Montagnais leave them to die. Orphans, even when adopted, were treated with a severity which might well have been called cruel. And then their women—oh! how unfortunate are Montagnais infidel women! The men, so gentle, so kind to strangers, so cowardly towards imaginary enemies, often became the executioners of the companions of their lives. No tribe probably held its women in such contempt. This selfish scorn so arranged matters, that the man reaped all the advantages, while to the mother, the wife, the daughter, were left the endurance of all the suffering they could bear, privation and labor. Oh! holy religion, what blessings are thy maxims—to tribes, as to individuals!

A consoling trait in the character of the Montagnais, is their freedom from thieving; there is certainly no more honest people. All travellers have observed and admired this feature, characteristic of them before the introduction of Christianity. This freedom from thievish propensity is so much the more striking as the Montagnais are, I believe, the most interesting of Indians. They have not the improvidence of others, and keep, as well as they can, something to meet times of want. They do not experience the unbridled desire which the Crees have, to eat all they possess in feasts; they sometimes invite their relations and friends to a banquet, but at proper times and places, and never with the result of poverty and suffering the next day. All Indians are beggars, the Montagnais more so than others, without, however, being offended with the refusals they often experience. Their curiosity is insatiable, they must needs see and touch everything, but what is very remarkable, is that they invariably replace such articles as naturally most excite their covetousness, even when they might steal them without risk of suspicion.

Superstition, natural to ignorant man, and the result of a necessity for some belief, prevails amongst the Chipewyans, restrained, however, within narrower limits than in the case of some other Indians. They have their jugglers (*jkawze*) who dare not claim the power arrogated by Cree and Saulteaux jugglers.

Polygamy, common to all infidel nations, is found amongst those of whom I am speaking. Marriage does not appear to them to be binding, hence, doubtless, great disorder. It is consoling, however, to know that this people observe the laws of nature so far as not to commit unnatural crimes, notwithstanding the numerous examples of the kind notoriously furnished by the Crees, with whom they are in daily communication.

It can easily be understood that the total of these qualities has favorably disposed the Chipewyans to embrace Christianity; nearly all the family have accepted our holy religion, and the great majority of them faithfully observe its important obligations.

Amongst the Montagnais are some of our most thriving missions. Their happy disposition made us seek them out from the first. It being impossible to preach the Gospel to all the Indians of the Northern Department, Bishop Provencher, and his successor, preferred to labor at the conversion of the Montagnais. Success has shewn the wisdom of the plan. A vicarship was created nearly exclusively on account of this group of tribes; besides, the Montagnais of l'Ile à la Crosse District are now under the care of a newly appointed pastor, in consequence of the missionary success amongst them, as well as at Upper Saskatchewan River.

The Montagnais family inhabits the districts of English River, Athabaska River and Mackenzie River, with the exception of the coast of the frozen ocean, occupied by Esquimaux. Some Cree families also spread out to Athabaska.

The Chipewyans include a great number of tribes which we shall class in four groups:—

The Chipewyans,
The Castors,
The Slaves,
The Loucheux or Quarrellers.

The Chipewyans include three tribes:—

The Montagnais, properly so called,
The Cariboo eater (Mangeur de Caribou),

The Yellow Knives (Couteau Jaunes), who are not distinguishable by any striking feature, unless it be differences in clothing, depending upon the materials supplied by the localities in which they live.

2nd. The Castors include:—the Castors, properly so called, living on the banks of Peace River and the splendid lands washed by that river; the "Mauvais mondes" (Bad people,) who are neighbors of the others, and live on the eastern branch of Mountain River; lastly the Sarcis, of whom we have already spoken, as having separated from the Montagnais and joined the family of Blackfeet. The Castors' language differs from the Chipewyans' proper, but is related to it, and the similarity of idiom permits the classification of the two tribes under one head.

The Castors keep themselves apart from their brothers, whose good nature is not quite equalled by theirs. More levity, generosity, improvidence, and an unbridled passion for gambling, also mark a difference of character.

3rd. The Slaves, who derive their name from the profound contempt in which they were held by the others, at the time their enemies—when in war they fled before their adversaries.

The tribes which compose this nation, are the Slaves, the Hare-skins, the Dog-rib (*les Plats côtés de chiens*), the Tekenés, the Nahanés, and other small tribes composed of only one or two families. Differences in the languages of these tribes, as well as certain similarities, appear to refer these to the heads under which I have classified them.

It is difficult to realize the extreme poverty in which these latter Indians live. Their climate is one of the most severe. In some places, they are so far to the north that the sun does not shew above the horizon for whole weeks, and they are there exposed without any loges or tents, having merely huts made of branches. When hares or rabbits fail them, their want is frightful. It was during one of these trials that they were seen to give themselves up to all the horrors of the most revolting cannibalism. On this occasion twenty-four Hare-Skin Indians were eaten by their brothers at the gate of one of the Honorable Hudson Bay Company's posts. Justice and truth require it to be said that, almost invariably, distressed Indians obtain relief at the trading posts: when practicable, relief is even sent to those known to be in extremity. The occasion we

allude to happened in the winter of 1840-41. Mr. Fisher, then in charge of Fort Good Hope, instead of being able to assist the Hare-skin Indians, who were starving, was himself obliged, with his men, to abandon the trading post of which he had charge, to seek refuge elsewhere, leaving only a Canadian called St. Arnaud, to take care of the office. Distrusting the Indians who were grouped around the Fort hoping to obtain succor, St. Arnaud was under the cruel necessity of closing the doors to save his life, and the establishment entrusted to his care. He supported his own and his family's lives with pieces of parchment which were used in the windows, the ends of cords or pieces of leather which had been dropped in the sheds, or in the Fort. At the same time the unfortunate Indians were suffering all the horrors of famine ; a great many of them died ; twenty-four were eaten. By the light of the camp fire, St. Arnaud saw the unhappy mothers, suffering the agony of despair, seize their little infants, dead from inanition, raise them in the air, uttering dreadful cries, followed by a laugh of desperation more excruciating than their weeping, then he saw them roast their children, to dismember them and share their flesh with those whom a little remaining vitality preserved from the final agony!

This unhappy people, usually so gentle, surprised two sleeping letter-carriers of the Hudson's Bay Company. Women killed them in their camp with axes, and the tribe fed upon them.

It must have been extreme want which, from the time of these events up to the arrival of missionaries amongst them, led this tribe to destroy their girls at birth, or a few months afterwards. This very horrible custom does not occur amongst other Indians of the Northern Department; on the contrary, they all love their little children; they certainly prefer their sons, but their daughters, too, get a large share of the love planted by nature in the hearts of fathers.

If the distressed cries of those innocent victims have rung along the banks of Mackenzie River, let the echo of their plaintive voices excite compassion for the extreme want which alone could lead to such crimes.

Are they then useless and vain, the heroic efforts of the men who have gone to live the lives of these unhappy people, to improve their moral, and with it their physical condition? It is in that inhos-

pitable region, in the midst of the unheeded tombs of so many victims of suffering and grief, at Good Hope, where lie the mortal remains of dear and zealous Father Grollier. May the sublimity of *his* sacrifice rise, even to the throne of God, as a sweet incense, to neutralize the heavy and disgusting atmosphere overhanging all these human sacrifices! May the eager accents of prayer of this, the first martyr of apostleship in Mackenzie Vicarage, bring down an abundant shower of blessings upon the too unfortunate Indians to whom he was the first to say, "Do not murder your daughters." And then, to give weight to his words, he expended his own life of noble tender-heartedness, generously and rapidly, for the benefit of these neophytes and catechumens.

4th. The fourth nation connected with the Montagnais family is the Loucheux. The name is a translation of the Montagnais Dékedhé.

The Loucheux call themselves Dendjiye (Men), and English travellers generally call them Quarrellers. The Loucheux are generally classed as Montagnais on account of similarity of language, but difference of habits would point to other relationship.

Very few of the Loucheux live within the limits I have given to the Northern Department. The mass of the nation live beyond the Rocky Mountains in the territory ceded by Russia to the United States.

Of late, the Loucheux have been at war with the Esquimaux, and even amongst themselves.

The Loucheux are large people. Their warlike spirit displays itself in ornamentation, of which they are very fond; rich and elegant dress appearing to mark the handsome and good soldier. Modern armies shew that this idea about appearances is not foreign to the maxims of the art of war. Why should not our warriors of the woods and of the plains carry a bunch of long feathers on their heads? The most valiant of military commanders in the best trained armies, look upon a plume as a necessary finish to the uniform of any branch.

The Loucheux have a marked liking for colored glass beads, which the Montagnais despise. A similar remark may be made about daubing the face with colors. Apart from a spirit of affectation, this habit of the Indian on the war path, is due, in a great measure, to a desire to render their appearance formidable, or to conceal

the strong emotions caused by fear which very frequently makes them tremble all over when they reflect on the possible result of the combat.

Their shell-work, as well as their glass trinkets, are extremely chaste. Colored beads are also used for currency, being more convenient than furs in supplying the place of coin.

The Loucheux are credited with better behavior towards their women than other Montagnais.

Their tents are not conical like those of their brothers, but semi-eliptical, and are well arranged to protect them against the excessive cold to which they are exposed.

The various Montagnais form a population of about 15,000. The tribes of Mackenzie River especially have been for some years a prey to a contagious disease which is rapidly decimating them.

The Montagnais, without being so well supplied with beards as white men, have much more than other redskins. I have seen a great many pure Montagnais children with bright red hair, and these same children advanced in years, with hair as black as that of the rest of the tribe. This peculiarity, frequently observed, has strengthened my conviction that the accident of circumstances, as much as extraction, originates many of the differences existing between Indians and their civilized brothers.

V. THE ESQUIMAUX.

Passing through the Northern Department to study its ethnology, we have just glanced at the Aborigines who occupy the country from its south-eastern extremity to the mouth of Mackenzie River; but there is a people of whom we have not yet spoken, the Esquimaux, living on the coast midst the perpetual glaciers of the Arctic Ocean, over which, as a guard, Providence appears to have set this people adapted to its frightful climate, and they in turn appear to think it made only for them. In America the Esquimaux form a living curve about the polar sea. They are about all the straits, on very numerous islands, and on the mainland from Greenland to Behring's Straits, avoiding coming south on the Hudson's Bay, past the 60th parallel of latitude: their mission, to guard the frozen ocean, brings them to the south of this latitude on the coast of Labrador. The Esquimaux, not content with being only an

American people, cross Behring's Straits, and on the Asiatic coast are known as Namollos. These Indians, then, form a connecting link between the old and new worlds; they are the only uncivilized race to be found on both hemispheres, in proof that the inhabitants of all continents have one and the same origin.

The name Esquimaux is of Cree or Algonquin origin; Ayaskimew (plural ayaskemewok) being the name given by the Crees to their people. The etymology and meaning of the name is found in the two roots "Aski" (raw flesh or fish) and "mowew" (he eats), implying "He who eats raw flesh, or fish."

It is easily understood that the tribes of a race occupying so extended a territory must differ. The distance between Labrador and Behring's Straits, from Greenland to the northern extremity of Asia, is too great for the race occupying its coast line to be everywhere alike. Some have experienced influences which have modified their habits and not affected others; all, however, speak the same language, from which it may be concluded that they have a common origin.

We would speak here only of the Esquimaux of the Northern Department, who are to be found between Churchill and the mouth of Mackenzie River, who were but lately within the jurisdiction of the Bishop of St. Boniface, and who are now, some in the vicarage of Athabaska and Mackenzie River, and the others in the last ecclesiastical subdivision of the country.

These Esquimaux call themselves "Innoït." I don't think they number more than 4,000 or 5,000.

The Innoït are greatly renowned for bravery. They know that they must defend their country, else, were they driven from their narrow shore line, whither could they go? But in this country they are exposed to war at only one point, the mouth of Mackenzie River, whose possession the Loucheux dispute with them, otherwise they come in contact with none, unless it be the Cariboo Eaters, who also frequent Fort Churchill, whom they meet on the outskirt of the barren lands, and with whom they live in perfect harmony. The Cariboo Eaters are certainly not men to give occasion for cultivating the art of attack, or of defence; naturally of gentle disposition themselves, they declare that their dear neighbors are still more gentle and perfectly docile. This, however, does not prevent them from sometimes thinking that the Esquimaux are their enemies,—

an effort of imagination which proves only one thing, and that is their own pusillanimity.

Esquimaux are not giants, but they are not so short as is generally supposed. The women, however, are below average height, which will not surprise those acquainted with the Montagnais tribes. I cannot assent to the opinion which connects Esquimaux with white races. I think that, without wronging them, they may be said to be slightly yellow, if it be too much to say that they are Red-skins. That Esquimaux may be whiter or less coppery than other Indians and yet have a common origin, may be easily understood. There is certainly less difference between them and their neighbors than between people from different parts of Europe. The life led by Esquimaux would have considerable effect upon their complexion. Shut up in their ice cabins for a great part of the year, without light and without fatigue, it is simple to understand that they may be fairer than others of the same race who are constantly exposed to inclemency of weather, and upon whom want produces striking effects. I have seen Indians of ordinary color become almost black as negroes during severe famine, and in mid-winter; and to such an extent is this true, that when I meet Indians whom I know, or presume to have suffered hunger for a prolonged period, I examine their complexion to assure me of their actual condition. The beard of the Esquimaux is not more peculiar than that of the Montagnais.

In short, I consider that they are of the same stock as our other Indians, but more closely allied to Kamschatkans, or northern Mongols.

The Esquimaux live in wood huts, which they build of drift wood which has been carried to sea by the rivers, for, of course, wood does not grow on their desert coasts. In default of wood, stone is also used for building. In either case, snow and frozen water serve as cement. When there is no other material, ice, which is never wanting, is at the service of this unfortunate people, taught, like other men, by nature, to overcome such obstacles as she has thrown in their way.

A little moss, a few seals and ice, these are often alone available to the Esquimaux; and with these poor means, in the midst of horrors and of a chaos of frozen coast, he supports existence, prolongs life, and does not always suffer so much as might naturally be imagined.

Ice makes a house in which doubtless there reigns squalor and discomfort, but which, from its nature, admits light from without, and at the same time screens its occupants against wind and storms and the rigors of a climate without parallel. The flesh of seals feeds the family; their skins clothe them, and their oil supplies the lamp, whose wick of moss on a stone, or the frozen floor, sheds a dim light. This is their only light, and their only fuel. There live beings very low, no doubt, in the scale of humanity, deserving of all our compassion and our interest: beings in whom shine rays of intelligence, and in whose bosoms throb feeling and loving hearts. The mother bestows affectionate kisses on her cherished infant, and, in the absence of all other means, clothes it with affection, solicitude and a little moss. There is the eye of man which cannot contemplate the splendor of the sun that is hidden from view for many months of the year, in the midst of nature which shews neither flower, verdure, nor vegetation, but is always clothed in a death shroud—there, the eye of man rests with sweet emotion on those whom he loves, and whom, in his language as in ours, he calls father, mother, husband, wife, child, brother, sister, friend! These family ties unite beings who appear to have no other source of enjoyment.

How great is their need of this feeling, to enable them to experience some joy here below! For, let us declare it, the enthusiasm of certain poets is very absurd when, in prose oftener than in verse, they paint the well-being of Esquimaux and other Indians, from the dreams of their imagination, and not from a true knowledge of their actual condition.

I have said that the Esquimaux who visit Churchill are very gentle, I will add that now, for some time, they have had trading relations with that post. The other Esquimaux of the Northern Department began to form such relations only in 1849. Up to that time, their enemies, the Loucheux, did not allow them to ascend Mackenzie River, and their kind of life on the sea-coast was not sufficiently attractive to draw others to them. In this region, particularly, the Esquimaux are great thieves. They think they have a right to all a stranger's property. They display as much adroitness as effrontery in stealing and concealing whatever is within reach. Why should not the glaciers of the North have their pickpockets as well as the most polished centres of civilization?

The Esquimaux build their huts in groups or villages where whale fishing assures them of abundant subsistence. Under other circumstances they live very isolated, gaining a livelihood by seal fishing and cariboo hunting. Naturally the interminable and severe winters through which they pass, oblige them to be more provident than our other Aborigines.

When the cariboo are migrating at the close of summer to avoid a winter they could not survive, the Esquimaux kill them in great numbers, just as they seize with great dexterity, courage and perseverance, every opportunity for fishing, notwithstanding its difficulty in the frozen ocean.

Their cleverness in making leather is astonishing; they succeed perfectly in making it very pliable and waterproof, so that they make canoes of it, their "kayiak" and "uniak." The kayiak particularly is extremely light, and is used by hunters, who install themselves in it, and even enclose themselves by means of a very flexible and waterproof dress, made from the intestines of the whale. This dress is fastened about an opening in the upper part of the canoe, which is otherwise completely covered in. The hunter, or fisherman, is no sooner seated than he laces the upper part of the dress around his body. There he is, on the Arctic Ocean, in a boat so light that he carries it on his shoulder to the shore, and in which he ties himself so securely, that waves may wash over the boat and the man in it, without risk of drowning the one, or swamping the other.

The paddle of the Esquimaux is double bladed, which makes it easier to guide, and the action quicker in steering the frail boat. It is surprising to see the Esquimaux in it, facing the dangers of the sea at considerable distances from the coast. He displays, too, great dexterity in the construction of ice sledges; and his expertness in managing his untiring dogs is wonderful.

All travellers assert that Esquimaux are more susceptible of being educated, and more manageable, than their neighbors. Their remoteness has hitherto prevented their favorable character being considered. Insufficient means, particularly as regards *personnel*, have denied us the happiness of earlier bearing to them the torch of faith. Its soft light, however, is beginning to shine in their eyes. The missionaries of Good Hope have already made several successful journeys amongst the Esquimaux of the west; while one from Cariboo Lake started at the end of last winter to pass the summer

amongst the Esquimaux at the east. Let us pray for the success of an enterprise so full of danger and generous self-denial, and so abounding in sacrifices of all kinds. May God convert the Esquimaux, and thus accord to their devoted missionaries the only recompense that their zeal asks for here below!

CHAPTER VII.

THE ANIMAL KINGDOM.

With the view of filling in the outline I have sketched for myself, I wish, in this chapter, to bring out the most striking features of that part of the animal kingdom which relates to the country that is the subject of this sketch.

Nature, even in the midst of the rigors of the climate, is lavish here as elsewhere. If the animal kingdom, like the vegetable, does not present to us all the riches that it displays in more fortunate regions, it cannot on that account be called sterile: it has even specialties reserved for our eternal glaciers, and riches that spring, so to speak, out of our destitution, and the rigors to which we are subjected.

Complete treatises on the zoology of the North, by men who have specially devoted themselves to the interesting and diversified subject, are procurable; but as these works are voluminous and expensive, I thought I might oblige those interested in me, by giving an epitome of what appeared to me to be the most striking points of the subject. I shall devote a portion of this chapter to each of the four classes of the first great division of the animal kingdom. It is not to be understood that there are no examples here of the other divisions worthy of interest. No, the division of articulated animals in particular can furnish subjects for deep study; but it is impossible for me to think even for a moment of entering on such a work.

I borrow the generic and specific names of the majority of the animals I shall enumerate from Sir John Richardson's "*Fauna Boreali Americana.*

This *class*, it is known, is subdivided into nine *orders*.

In the preceding chapter I spoke of the population, and even of tribes of Aborigines, in the Northern Department.

FIRST CLASS.—*Mammalia.*

1st Order.	MAN.				
2nd Order.	Quadrumana or Monkeys are not found in the Northern Department.				
3rd Order.—Carnassiers.	I. Fam. Cheiroptera.		GENUS	Vespertilio	2 species.
	II. Fam. Insectivora.		GENUS	Sorex	2 species.
			"	Scalops	1 "
	III. Fam. Carnivora.	1st Tribe: Plantigrades.	GENUS	Ursus	4 species.
			"	Meles	1 "
			"	Procyon	1 "
			"	Gulo	1 "
		2nd Tribe: Digitigrades.	GENUS	Mustela	5 species.
			"	Lutra	1 "
			"	Mephitis	1 "
			"	Canis	5 "
			"	" (Lupus)	6 "
			"	" (Vulpes)	6 "
			"	Felis	3 "
		3rd Tribe: Amphibious.	GENUS	Phoca	1 species.
			"	Trichechus rosmarus	1 "
4th Order.	Marsupial animals are not found in the Northern Department.				
5th Order. Rodentia.	I. Fam. with perfect clavicles.		GENUS	Fiber	2 species.
			"	Arvicola	5 "
			"	Mus	1 "
			"	Meriones	1 "
			"	Arctomys	6 "
			"	Sciurus	3 "
			"	Pteromis	2 "
			"	Jeomys Talpoides	1 "
	II. Fam. with imperfect clavicles.		GENUS	Hystrix	1 species.
			"	Lepus	4 "
6th Order.	Edentata are not found in the Northern Department.				
7th Order Pachydermata.	I. Fam. Proboscidea.		No Elephants.		
	II. Fam. True Pachydermata.		GENUS	Sus	1 species.
	III. Soliped.		GENUS	Equus	3 species.
8th Order. Ruminantia.	I. Fam. Hornless.		No Camelidæ.		
	II. Fam. Horned.	1st Tribe: Solid Horned.	GENUS	Cervis	5 species.
		2nd Tribe: Hairy Horned.	No Giraffidæ.		
		3rd Tribe: Hollow Horned.	GENUS	Antelope	1 species.
			"	Capra	1 "
			"	Ovis	2 "
			"	Ovibos	1 "
			"	Bos	2 "
9th Order. Cetacea.			GENUS	Physeter	1 species.
			"	Balæna	1 "

To prevent certain learned men from being led by the ignorance, sensuality, and color of our Indians, to conclude that they are in their first period of transformation, God has not placed any examples of the second order of Mammalia—Quadrumana, in this country. There are no monkeys here; they are only to be found far away; and if our Indians were only improved monkeys, they must have migrated from a much greater distance than they have done, being men and sons of Adam.

I shall make no more remarks about the first two orders; but after giving a general table of the Mammalia, I shall proceed to examine the other orders of this important class.

Third Order.

Carnassiers.

The third Order of Mammalia is represented here by three families of several tribes and species.

Below is a Synoptical table shewing such examples as I know to belong to this order.

THIRD ORDER.—*Carnassiers.*

Family.	Tribe.			Species.
I. Cheiroptera.			Bat	2
II. Insectivora.	I.		Shrew	3
			Shrew-mole	1
III. Carnivora.	I. Plantigrade.		Bear	4
			Badger	1
			Racoon	1
			Wolverine	1
	II. Digitigrade.	Mustela.	Weasel	1
			Stoat	1
			Minks	1
			Marten	1
			Pekan	1
			Otter	1
			Skunk	1
		Canis.	Dog	4
			Wolf	6
			Fox	6
			Kit	1
		Felis.	Cat	1
			Lynx	1
			Tiger Cat	1
	III. Amphibious Animals.		Seal	1
			Walrus	1

I.—By the foregoing table it will be seen that the family of Cheiroptera is represented here by only two species of one tribe.

Bat.—Vespertilio. { Primosus, or Hoary Bat. / Lululatus, or Say's Bat.

The bat—harmless here as elsewhere,—sleeps throughout the winter, and during the day in summer, enveloped in its wings, hanging by its feet, head downwards, and very certain that it will not suffer from inflammation of the brain. It begins its eccentric flight at night, and here, at all events, is not likely to intimidate the brave children of the North, nor to excite the diversion my school-day recollections bring back to mind, as the result of its visiting our dormitory.

II.—The family of Insectivora is represented by three species of shrews, viz., the American Marsh shrew (*Sorex Palustris*), Forster's (*Sorex Forsteri*) and the little shrew (*Sorex Parvus*). The shrews are the most diminutive of our quadrupeds; but our severe winter does not affect their feeble and slender existence, nor does it check their movements.

I know of only one species of mole here, the shrew mole, (*Scalops Canadensis*). We do not make war against them; they do not trouble us.

III.—The family of Carnivora is naturally more interesting than the preceding, and better worthy of special study. It is represented by three tribes in this country:—

Plantigrades, Digitigrades and amphibious animals.

1st. The tribe of Plantigrades includes the following species:

The Polar, or Sea Bear—*Ursus Maritimus.*

The Grizzly Bear—*Ursus Ferox.*

The American Black Bear—*Ursus Americanus.*

The Barren-Grounds Bear, or Brown Bear—*Ursus Arctos Americanus.*

The American Badger—*Meles Labradoria.*

The Raccoon—*Procyon Lotor.*

The Wolverine—*Gulo Luscus.*

The polar bear appears to be the outlying sentinel of the Arctic Region, posted to watch great glaciers, on which he takes his beat when not in a state of lethargy. This species is marked by a greater length than the others; the neck is longer and of a yellowish white; the muzzle and tongue are black; the lips and inside of the mouth are of nearly the same color. The animal sometimes measures nine feet in length, and four and a half in height. His strength is exceedingly great; it is equally savage, and is feared with good reason. It goes great distances out to

sea, on icebergs; its principal food is fish, which accounts for the disagreeable flavor of its flesh.

If the polar bear be considered the sentinel of the north, the southern boundary of the Northern Department finds a guardian in the grizzly bear, also furnished by the Plantigrades. This is the largest of the bears, some individuals attaining to an enormous size. I have seen grizzly bears' claws that measured seven inches in length. From this may be judged how great would be the pleasure of falling into the arms of such an animal, to have your sides torn open, or to be hugged with like warmth. The grizzly bear is dreaded even by hunters, who attack it with redoubled precaution, and combine to help one another unless armed in a very exceptional manner. This species is generally found on the plains, or in the outskirts of the woods bordering them. The color of its hair varies very much; white hairs shew on a russet or black ground.

A book might be written about the feats of strength of this formidable winter-sleeper; and many pages might be filled with accounts of the coolness and courage of hunters, or even of some women, who when seized by this species of bear retained their presence of mind, and managed to escape from its clutches without displaying the least emotion. I have seen many Indians who have been deprived of the use of a limb, or have been marked with deep cicatrices, the result of encounters with grizzly bears.

The black bear is found all over the country. I think that it differs from the European bear, but it is not a savage animal. Even children hunt it, and in pursuit of this animal it is the hunters greatest anxiety to get close up to it, for it invariably runs away on the least noise, and never attacks, even when wounded, unless it is brought to bay.

Chocolate, or rather, cinnamon colored bears are merely a variety of the black bear, of which they are, not unfrequently, the young. The fur of both kinds, but particularly the cinnamon colored, is very handsome. The coat is long, thick and silky. Everybody knows that bear's flesh is excellent, and particularly when the animal has fed on fruit.

The fourth species of bear frequents the sterile country up to the very shores of the Arctic Ocean. It feeds during its life of activity, on both animal and vegetable substances.

This animal, neither so large nor so fierce as the grizzly bear, which lives on the southern plains, is also dreaded by Indians, even by those who do not in the least fear black bears. I once travelled with two young Indians, Cariboo Eaters (*Mangeurs de Caribou*), who were constantly in childish fear of meeting with imaginary enemies, as I described in the last chapter. So, every evening we had to camp on some island, and, no matter at what trouble, there and there only. Darkness, wind, rain, nothing could induce them to pass the night on the mainland. Every night we had to push on to reach some island, however small or inconvenient it might be. After much argument, I did not succeed in removing their fear. I laughed a great deal at their cowardice, saying to them, that for my part, I could not see any other enemy in these dense woods than bears. My surprise was very great to hear them burst out into a roar of laughter, declaring that they desired nothing better than to see a bear, that they might kill it and break the monotony of our daily meagre fare; then they went on to say it would be a very different thing were we on the mainland, (the barren-grounds), there the bears are terrible.

The plains are frequented by another of the Plantigrades which, like the bear, winters in a den without losing much flesh. The badger is a small animal, from two to two and a-half feet long. Shy, it flies at the least noise, or at the sight of man, but at the same time it fully gratifies its cruelty towards small animals, on which it feeds with great voracity. It partakes, too, of vegetable substances to a small extent. The coat of the badger is too dull to be elegant, but it is very stout. This small quadruped has wonderful strength in its fore-feet; when it has once got the fore-part of its body into a hole, it is impossible to draw the beast out, and this, notwithstanding the peculiar facilities, of which hunters know how to avail themselves, presented by the hinder part of the animal.

Raccoons are found along the southern boundary of the Northern Department. They appear to be unable to live further north, but are found in great numbers further south. This animal resembles a fox with the habits of a bear. It feeds on roots, plants, green grain, fruit, insects and birds. It is particularly fond of blood and brains. It catches fish in shallow water. Its fur is nicer looking than badger-skin, but it, also, is not very choice.

The only other member of the Plantigrades in this country is the wolverine, the plague of the forest and the scourge of the fur hunter.

This animal, as if to make up for the torpor of others of the family, is endowed with a feverish and very extraordinary activity, particularly in winter; yet it cannot run quickly; its progress is not even easy, except on well beaten pathways. About as big as a dog of only average size, it is able to commit depredations requiring strength and skill that often appear fabulous. It steals all kinds of things, not only food but utensils, and even the long heavy country saws, and hides them in the snow, or elsewhere. I once witnessed one of these tricky performances of the wolverine: my fellow-travellers, coming to meet me, had left behind them in store, a double-barrelled gun, and a bag of provisions to be used on our return. Knowing the risk there was of losing these things, it appears they secured them. The gun was forced between the trunks of two trees that grew very close to one another; the bag of provisions was hung, by a cord, from the centre of a long pole, resting on two trees at some distance from one another. On our return, we were surprised to find how a wolverine had treated us. Not only had he climbed up one of the trees, but had even walked along the weak and flexible pole that appeared to be unequal to his weight, and gnawed through the cord by which the bag of provisions had been hung up. The food he had eaten, scattered or buried, and the gun had disappeared. After a long search we first found the leathern gun case, which had been taken off the gun, for it had been carefully put on to protect and conceal the piece. Then, in another direction and farther away, we found the gun under the trunk of a tree; leaves had been thrown over it, and scattered for some distance around as if to conceal the tracks of the thief. We should certainly have concluded that a man had been at work, had not the deep solitude of the forest obliged us to recognize the acts of a wolverine, of which traces were everywhere visible in the neighborhood. If the skilfulness of the wolverine sometimes insures him success, here is an incident that proves his mischief frequently brings punishment on him: An Indian had left his *loge* without anyone to look after it. A wolverine presently entered the deserted habitation, brought out, one by one, all the things he found inside, and hid them here and there, and even far

away from the *loge*. There remained only a bag of gunpowder. This the animal seized between his teeth, and concealed amongst the cinders in the fireplace. Some fuel still unextinguished soon burnt the bag and caused an explosion of which the roguish wolverine was the first victim, for it stretched him dead on the spot, scattering the brains of the thief right and left.

2nd. The tribes of Digitigrades is represented here in three distinct divisions: weasels, dogs and cats. There are seven species of weasels, and they excite the covetousness of fur fanciers, and furnish to this branch of commerce one of its richest resources.

The following, according to the table given, are the species of weasels—(*mustelæ*).

The Common Weasel—*Mustela Putorius Vulgaris.*

The Ermine or Stoat—*Mustela Putorius Ermina.*

The Mink—*Mustela Putorius Vison.*

The Pine Marten—*Mustela Martes.*

The Pekan Canadensis.

The Canadian Otter.

The Hudson's Bay Skunk—*Mephitis Americana Hudsonica.*

Our hunters scarcely distinguish between the weasel and the stoat. Both are reddish in summer, and in winter perfectly white. Considering the old established custom of using these fine furs to ornament the robes of high dignitaries in church and state, it will naturally cause surprise to learn that, here, they are thought so little of as not to be sought after. These small skins are so small that they do not attract the attention of those who deal in larger furs which pay better.

Next to these two dwarfs of the division about which I am now speaking, comes the mink, so choice, so fashionable and so highly prized just now, notwithstanding the infectious odor which it lavishes on those who hunt it. The mink lives on the banks of rivers into which it plunges, often even in winter, and it is easily killed, either with a gun or spring traps.

Next comes the marten, which delights in dry and arid places, and whose fur, always rich and highly esteemed, experiences the ame attention that fashion has won for the mink skin.

Then the pekan, the great weasel of the north, richer even than the preceding, but less numerous. Like the marten it lives on bood and carnage. Although the weasel delights in partridge flesh,

its own is not on that account pleasant. Indians who are by no means educated gastronomists, eat weasels only when pressed by hunger.

The otter may be grouped with the three animals last named. Its coat, while not so silky as the others, is not the less rich or highly esteemed, and is superior to them as regards closeness and durability. Some otters are all black, and extremely beautiful. Even in winter they seek water, at rapids, where the severe cold has not been able to freeze it. It is a curious sight to see them playing about, and when the temperature is at the lowest, plunging and replunging after fish, and then moving away to great distances in search of other places where ice has left an opening into the river. In these wanderings, otters make a great trail on the snow, without leaving any defined impression in the groove. On first seeing one of these tracks, it is difficult to imagine that it can have been made by a quadruped three or four feet in length, which crawls, so to speak, over a considerable distance, then gives a spring, and again goes on crawling with wonderful speed.

The last of the weasel tribe is the skunk, the *chicak* of the Crees (from *chicakok* or *chicago*, Land of skunks). This animal is very prettily marked, but otherwise is not at all pleasing. A very slow runner, it is easily killed with a stick. Its only defence is the ejectment of a disgusting fluid, which it reserves for the moment of attack, and scatters more or less as it runs, thus disclosing its whereabouts. The infectious smell that comes from the fluid is perhaps not quite so bad as it has been described. I have frequently seen skunks killed, but I have never witnessed the disagreeable consequences which are related on this subject. The skin, which retains the smell, is considered a powerful specific, in some parts of the country. I have seen it kept in houses for this purpose ; but to tell the truth, I have found the remedy worse than the evil.

When the animal is carefully skinned, its flesh is far from being unpalatable ; I have enjoyed a meal of it, and shall eat of it again whenever I shall have an opportunity. In winter, the skunk lives under ground and comes out only at rare intervals. It feeds, like the weasel, upon all the small inhabitants of the forest.

The second division of the Digitigrade tribe includes the following species:

The Domestic Dog—*Canis Familiaris.*
The Esquimaux Dog—*Canis Borealis.*
The Indian Hare Dog—*Canis Lagopus.*
The North American Dog—*Canis Canadensis.*
The Prairie Wolf—*Canis Latrans.*
The American White Wolf—*Canis Lupus Occidentalis.*
The American Grey Wolf—*Canis Lupus Occidentalis Griseus.*
The American Red Wolf—*Canis Lupus Occidentalis Sticteus.*
The American Dusky Wolf—*Canis Lupus Occidentalis Nubulus.*
The American Black Wolf—*Canis Lupus Occidentalis Ater.*
The Arctic Fox—*Canis Vulpes Lagopus.*
The Sooty Fox—*Canis Vulpes Lagopus Fulginosa.*
The American Fox—*Canis Vulpes Fulvus.*
The American Cross Fox—*Canis Vulpes Decussata.*
The Black or Silver Fox—*Canis Vulpes Argentata.*
The Kit Fox—*Canis Vulpes Cinerco Argentatus.*

The dog, man's faithful companion, is not wanting from the Northern Department. It there shares with its master his labor, his sufferings and sometimes his prosperity. The dog, not satisfied only to hunt with the Indian, draws or carries his burdens, and shares his great trials in the midst of severe and protracted fasts; sometimes he satisfies his gluttony on the carcases of numerous animals thoughtlessly and improvidently slaughtered.

There is a great variety of the dog in the Northern Department. Nearly every breed known in Europe has been imported into this country; and, moreover, each wild tribe presents varieties of form, color, and size, and yet all present one peculiarity, cocked ears. All the domestic breeds crossed with wild ones, and all the wild ones crossed with one another, and even with wolves, make a confusion of varieties which it is impossible to classify, or even to distinguish.

The Esquimaux dog preserves its distinctive character more than the others, for the simple reason that his master keeps himself quite apart from other people; he has either no communication, or very little, with the whites, or even with other Indian tribes.

The Esquimaux dog has great strength and endurance. They have been known to run, without other rest than lying out on the snow during the night, for thousands of miles, drawing sleds laden with a

hundred pounds for each dog, and this with scarcely a sign of fatigue. An advantage which almost all wild breeds, and particularly Esquimaux dogs, have over the common kinds is that they require less food: also, in their winter journeys they are less subject to footsore, which, more than anything else, exhausts the trader's dog; and to this inconvenience is to be added the trouble it involves to the dog driver, who has every morning to put a shoe or stocking on all the paws of the animals in his train, and in the camp, in the evening, he has to ornament the fireplace, at which he warms his benumbed limbs, with a curious display of a multitude of dog's shoes that have to be thawed and dried against the morning.

The dogs of Plain Indians are generally of large size, because they share the abundance of their masters, who are buffalo hunters; while the poor little dogs of the Montagnais Hare Indians, and others, indicate very clearly the habitual starvation they experience. One must be almost a witness of these poor animals' privations to understand how much they can endure, and how little food is necessary to support their wretched existence. Dogs living in packs, and driven with a whip, lose nearly all their peculiar sagacity. The majority of traders' dogs are so stupid and stubborn as to try the firmest patience, and unless one has driven dogs for long journeys it is impossible to form an idea of the difficuties and fatigue involved in the task; and, also, unless one has travelled in this manner, how difficult it is to understand how very useful, and even necessary, the dog is as a beast of burden in this country, and his capability for this kind of work. On a good road, good dogs can travel for twenty hours out of the twenty-four, feeding only once during the day, and this for weeks at a time. Trained dogs, in good condition, can thus travel for three or four days at a time without any food at all, and without showing signs of much exhaustion.

The difference between wild dogs and wolves is not great; it is very slight indeed between the small dog and the little Prairie wolf, called, also, *Loup à Moule*. This name is derived from the hunters drying this animal's skin on a stretching frame (*Moule*) as is usual with all small fur skins. This little wolf is about three feet long, has a bushy tail, is wonderfully swift, lives in large packs on our vast prairies, is very harmless, sports about close to hunters, and howls, snarls, and barks in turn, without in the least alarming the *voyageurs*, but not without causing them great annoyance by their noise, sometimes continued throughout the whole night.

Common American wolves are very numerous in our country. They probably differ in form from the European wolf, and certainly have not its boldness: for notwithstanding the ferocity of our wolf it is generally frightened not only at the sight of man but by any unfamiliar appearance. Wolves, besides attacking all domestic animals, also prey upon almost all the denizens of the forest; two or three of them would devour the strongest dog, yet the appearance of the smallest child puts them to flight. A solitary wolf will not always defend itself against a large dog. It is said that hunger provokes them to attack man. I have never known of such an occurrence.

A fisherman was in the habit of entrusting fish to one of his dogs for his master. To prevent the dog being attacked by wolves, the man attached bells to the animal. The dog performed his duty daily for several consecutive winters; but, on one occasion, the bells being forgotten, the poor animal was eaten up, and the splendid fish that the delicate attentions of a poor servant intended for the chief of a post, became, with their carrier, a feast for wolves. While I was staying at *l'Ile à la Crosse*, three large wolves, one black and two grey, made havoc amongst our train dogs, eating several of them. Their cunning in avoiding traps enabling them to escape the death planned for them, a price was set upon their heads. An old Canadian, of the name of Morin, made a great effort to gain the reward, and the skins. A skilled trapper, he made use of all his experience in setting his best spring traps, which, as usual, he fastened by a chain to a very large piece of wood. All the dogs were carefully locked up, and every other precaution adopted to make the three troublesome visitors hungry. Morin visited his traps daily, and everybody was in the habit of going to meet him on his return to learn the result of his expedition. The subject was the theme of the day. There came a furious storm during which the trapper remained at home. Calm weather followed, and the old Canadian went to visit his traps in the distance he saw snow covering one of the three thieves that had been caught: a second trap had been set off unsuccessfully, and the third had disappeared; disorder reigned in the pack of wolves; the others never appeared again. Morin, after long and vain searching, was regretting the loss of his trap when, a month having elapsed, the people of Green Lake, about 90 miles from *l'Ile à la Crosse*, saw a wolf walking on one of their lakes, apparently with difficulty. Several dogs were sent after him; he was caught and killed. He was no

other than one of the rogues from *l'Ile à la Crosse*, for the trap was still attached to his leg. The chain and log of wood were detached at the time of his companion's death, but he had wandered in every direction through the forest for a whole month dragging this heavy and cruel encumbrance in the midst of the most intense cold. This wolf was reduced to a mere walking skeleton, but the occurrence indicates a power and tenacity of life in the animal, difficult to understand.

Amongst the foxes are those of the Arctic Regions. There are two varieties of them; one is quite white, particularly during winter; the other has a bluish tint. This fox is much shorter than the common one; it has as ugly a head, but an uglier tail than its slim relative. Its fur is inferior, and very little thought of, although at first sight the striking whiteness of the first variety leads one to suppose it a valuable fur.

The ordinary American fox is very common everywhere here. There are three varieties of it: the American or Red Fox, the Cross Fox, and the Silver Fox, which is sometimes black. The varieties, as in the case of wolves, do not indicate different species, for they are sometimes found in one group.

The fur of the red fox is least prized. The value set on cross foxes is much higher, while silver fox skins rise to an exorbitant price. Some of these skins have been sold for more than sixty guineas a-piece. There is no perfectly black fox, and the variety is always called silver fox. In addition to beauty of fur, and fullness and elegance of tail, the value of this, the most costly of all furs, is decided by its darker or lighter color.

There are three species of the cat tribe here:

The Domestic Cat—*Felis Domestica.*
The Canadian Lynx—*Lynx Canadensis.*
The Tiger Cat or Panther—*Pardalis.*

Domestic cats were imported, and are not yet numerous. At several of the posts in the interior there are none. At some of our missionary establishments we have been annoyed by mice, and were unable to obtain cats; but as the country is progressing day by day in every way, it cannot be long before the mewing of this hypocritical friend of the family shall be heard throughout the Northern Department.

The Canadian wild cat, or lynx, is a native of this country. It

abounds here some years, its flesh supplying a valuable resource to those who hunt it for its skin. Its length is about three feet. Although of the cat kind, it moves like a rabbit, jumping like that animal, and, similarly too, has hind legs of great length. The flesh of the rabbit is its principal food. Ancient authors, and our Canadian *voyageurs*, give the lynx the additional name of *Loup-cervier*, because it is said that it conceals itself in trees to leap down upon deer to kill them.

The name *Pichon*, familiar in Canada, is that which the Crees give to the wild cat. This animal's fur, without being one of the most valuable, is yet rather choice. The lynx is easily taken, the slightest blow on the small of the back kills it; but it is generally caught, like hares and rabbits, with springs and snares. The best way, however, to catch them, is with dogs: the lynx being very timid takes to a tree on the first sound of a dog barking; the dog keeps the animal *treed* until the hunter arrives, when a shot causes a quicker fall than any movement that this extremely slow moving cat has performed during its life. The lynx is an excellent swimmer; it has no difficulty in crossing not only rivers, but lakes of considerable size.

The Panther or Tiger Cat of this country is a small quadruped, found, generally, on the Rocky Mountains, and sometimes comes down to the plains on the eastern side. This animal is about the size of an ordinary dog; its skin is fawn-colored spotted with black; its tail is long and fine; although somewhat savage it is not to be feared, and it is not common.

3rd. To finish what I have to say about the order of Carnassiers I shall add a few words about the third tribe of the third family.

I know of two amphibious animals that frequent the Arctic Sea and its coast; they are:

The Seal, or Sea Dog—*Phoca.*
The Walrus or Sea Horse—*Trichechus Rosmarus.*

The head of the seal is like that of the dog, which it resembles in character, being easily educated to a certain extent, and shewing great affection for its instructor. This amphibious animal is a precious resource to the Esquimaux. Its flesh supplies them with food; the oil extracted from it is also used for food, and is the only fuel burnt in the huts of these poor inhabitants of the frozen zone.

Its sinews, like those of a quadruped, make a very strong thread, used in sewing the skins. Its intestines take the place of transparent glass, and make waterproof clothing. The skin completes the dress, makes the summer dwelling, and canoes. The bones, too, serve to make various utensils.

The seal is caught by surprise while it sleeps at the water's edge, or it is followed and harpooned from a canoe.

The walrus, larger than the seal, is generally eight or ten feet long, but it sometimes reaches twenty feet. Its average weight is from 1,500 lbs. to 2,000 lbs.; its girth is about that of a horse; its mouth is as large as an ox's. From these circumstances it has derived the names *sea-horse* and *sea-cow*. Some call it *sea-elephant*, in allusion to its two enormous tusks which project downwards from the upper jawbone. These tusks supply a more valuable ivory than the elephant's, and its whiteness is striking.

In the polar regions the walruses lie in groups on the ice, crowded one against the other like pigs; one of the party acts as sentinel while the others have a snoring match. On the least sign of danger, a prolonged roar awakens the sentinel's neighbors, who pass on the warning to the very last of the groups; all start up, striking the ice with their strong tusks, and make a noise that reaches several miles away. The skin of this animal furnishes a peculiarly pliant leather; its flesh is hard and unpalatable, but its blubber, when fresh, has a very pleasant flavor.

A walrus supplies as much as three barrels of oil.

Their tusks render them dangerous to those who pursue them in boats which they can split.

The fourth order—marsupial animals—is not represented in this country. I shall therefore say nothing about it here.

II. THE FIFTH ORDER.

Rodentia.—The order of *Rodentia*, so common everywhere, cannot but abound up to the frozen regions. In this country there are representatives of two *sections* of the *order*, including ten *genera* and twenty-seven *species*, which are all enumerated in the following

table, prefixed to the details I propose to give about the most interesting and most useful of these quadrupeds:

		Species.	
5th Order, Rodentia.	1st Section: With perfect clavicles...	1	The Beaver
		1	The Musquash
		5	Meadow-Mouse
		1	The American Field-Mouse
		1	The Labrador Jerboa
		6	The Marmot
		3	The Squirrel
		2	The Flying Squirrel
		1	The Mole-shaped Sand Rat
	2nd Section With imperfect clavicles	1	Porcupine
		4	Hares and Rabbits

The genus *Castor* presents us with two species.

The American beaver—*Castor Fiber Americanus.*

The musquash—*Castor Fiber Zibethicus.* Everyone knows, at all events by name, the indefatigable and intelligent laborer called the beaver. In it, the Northern Department is indeed possessed of a resource; its flesh furnishes abundant food, and its skin a rich and substantial fur. An exterminating war against the beaver, at one time, very sensibly reduced their numbers. They are very far, however, from having disappeared, for in 1865 the Honorable Hudson's Bay Company collected sixty-eight thousand three hundred and seventy-four skins.

While in Germany and on the banks of the Rhone, the dense population, and the noise and bustle of the civilized world, oblige the poor solitary beaver, at the bottom of a burrow dug at the border of the stream, to bemoan the loss of the empire that nature had, as it were, bestowed on him: here, in the majestic calm, the perfect stillness, the vastness of our forests, the beaver gives to his ingenious instinct the fullest development of which it is susceptible. Here, in many places, it is not merely the individual that we see existing, neither is it the limited life of the family that we observe, —it is society. Whole tribes unite to build villages. Houses, invariably of two floors, bear witness to the uniform genius of these architects. The pantry occupies the ground floor, while the leisure hours, amusements, and sleep of the family, are reserved for the first floor. It is not to be understood, that the master is in his

office, the mistress in the drawing-room, and the master and miss Beavers in the school or play-room. No, the beaver is a brute; and many authors have fallen into the error of supposing it to be possessed of more reason than nature has bestowed upon it. But, however this may be, there is great skill displayed by this rodent, in the building of his habitation. The walls and upper part are remarkably thick, sometimes measuring several feet. Then, at the commencement of hard frost, the exterior is coated with a thick layer of mud, which immediately freezes, and has the double advantage of perfectly shutting out the cold air, and of guarding against the attack of wolverines. The sagacity of the beaver is also seen in the care it takes, not only to lay in provisions in advance, but also in arranging creep-holes, to insure its retreat in case of surprise and its subsistence in a day of need. The most extraordinary works of beavers are the dams they throw across rivers and along the shores of lakes. In this matter, one could not hesitate to grant them an engineer's diploma. Two points in their work attract attention: the skill and strength displayed in the construction are perfection of their kind; and even engineers, with the same materials—branches and mud—have not been able to make so good roads as are made by beavers. Their skill is of the same kind as the swallows', which fastens its very substantial nest to a smooth wall, and thus makes a comfortable home for its young; their dexterity is like the eagle's, who, with apparent negligence, puts dry twigs together on the top of the highest trees in the forest, and thus builds its aerie that wind and tempest may sway about with its flexible foundation, but can only be overthrown together with its support, and when its occupants have gone, remains firm, to bear witness to the development and perfection of unreasoning instinct under the powerful influence of the Creator. What would the works of man be, were Divine inspiration the only moving power, and the only guide of his genius? He who looks at a beaver dam, or assists in taking one to pieces, must be struck with the remarkable simplicity of the construction, against which angry waves, and flood of rapid streams, dash themselves without effect. One wonders how the mud kneaded and applied by the beaver's paws, unassisted by even its trowel-shaped tail, becomes a hydraulic cement that time hardens instead of dissolving. How many are the secrets that nature conceals from science? The extent of these works is as surprising as their

perfection. Some of them are really colossal, and several chains in length. Artificial lakes, of very considerable size, owe their origin to these dams. The extent of the dams is the most striking proof of the social habits of the beaver, for several families must have combined to carry them out, and if individual instinct produces the result of a general government amongst these laborers, they must necessarily be influenced by a sense of common interest.

The extermination of the beaver has been followed, in some places, by the disappearance of woods, or their transformation into prairie. At one time, beavers must have been extremely numerous, for their dams are found in all directions. Water, checked by these, could not flow in its natural course, hence a multiplicity of lakes of all sizes that kept the soil and atmosphere in a damp state, and thus forest growth was encouraged, as well as preserved against devastating conflagrations. On the death of the beavers the work of repairing the dams was neglected, the discharge channels that these useful quadrupeds opened or closed, according to the requirements of the time, now let all the water flow out of the basins, and they dried up. The woods, no longer supplied with moisture, drooped; then fire came, and this destroying element now unobstructed, accomplished its work of destruction, leaving no sign of the forest but the numerous dams that had been built by the beavers in days gone by, and that everywhere attract the attention of the traveller, reminding him of the number and activity of the first inhabitants of the northern and western regions.

Of course the beaver is an architect by birth, as the wolverine is a thief: neither the one nor the other needs instruction. It is neither the rod, nor *impositions*, nor rewards, nor sense of honor nor sense of duty, that urges them to perfect their work. The older ones are no more overseers than are the younger ones apprentices, I am sure, too, that none of them wear the cross of the Legion of Honor.

The beaver lives on grass, roots, and the bark of trees. I have never seen very large trees that have been cut down by beavers; and the exclamations of Indians, on shewing me an aspen, of eight inches in diameter, on which were the marks of beaver's teeth, persuade me that they rarely cut down trees of great size. Very large trees, blown over by wind on the banks of rivers frequented by beavers, are generally deprived of their branches by these animals,

and this may have led to the idea that they also felled the trees themselves.

The beaver is easily tamed, and eats whatever food is given to it. Hearne says "it is very fond of plum-pudding," and of roast beef, I suppose.

The tamed beaver is affectionate and fawning: it shews pleasure and joy in a thousand pretty ways. Its long incisors were formerly employed by the Indians as tools, particularly for hollowing out wood. It is easy to understand that they have been advantageously superseded by steel tools.

The coat of the beaver is a compound; the long hair, generally of a russet brown color, notwithstanding its shiny appearance, is far from coming up to the estimate that might be formed of it from the very high price at which the skin formerly sold. The short hair, on the contrary, is a down of great softness, and it was this that raised the price of the beaver skin so high, when it was the only felting material. Since silk has been introduced into this branch of industry, it has superseded beaver, lowering its price, but not supplying its substantial quality. However, as fashion requires frequent change in hats, the cheap silk ones retain their shine long enough to last until the adoption of a new pattern; and the successor of the old fashioned and substantial *beaver*, is not literally entitled to the name.

The tail of the beaver is more like a tongue, in shape, than like a tail; it is carried horizontally, and is covered with oval scales; it is about one-third the length of the animal, that is, from twelve to thirteen inches for a large beaver; it is about six inches broad; it is nothing else than a piece of fat,--but less oily than the fat of the body. This last quality makes the flesh less palatable than it is asserted to be by those who have never eaten of it without its having been subjected to preparations which greatly modify its flavor.

Although there is only one species of beaver in the country they are not all uniform in color: some are perfectly black, and these are by far the handsomest: on very rare occasions they are found white, and spotted. This variety is not a peculiarity of the beaver kind only: for, although the majority of wild animals have colors peculiar to species; there are exceptions in nearly every case: and

the varieties of colors amongst beavers are but accidents of like kind.

The second species of the beaver, in this country, is the musquash, which so nearly resembles the true beaver as to be classed with it as of the same genus, and yet differs from it a good deal.

The musquash, or muskrat, is about one-third the length of the beaver, while its small sharp-edged flat tail is about two-thirds the length of that animal's tail. The color of the musquash is somewhat similar to the beaver's; its fur is far from being so glossy, or silky, as the others; it is of an inferior quality, and the least valuable of all furs. Muskrats, however, are so numerous, that their skins are important articles of commerce: as many as one hundred and fifty thousand are annually exported.

The flesh of the muskrat, particularly in autumn, is not disagreeable, but one tires of it quickly when nothing else is to be had; and if there be any one who disbelieves me I invite him to come and try for himself.

The muskrat builds a house somewhat like the beaver's; being a weaker animal, it cannot transport heavy material; it makes use of the materials on the spot, for its foundations and walls; it uses the long grass or rushes of small lakes and marshes, in building its spherical dwelling; it does not pull up the grass, but merely binds it together with badly kneaded earth. While the robust beaver is satisfied with a rough flooring of branches, his little brother, the muskrat, makes a bed of straw for his delicate limbs: this is always placed above water level, although there is neither substructure, nor gallery, in the habitation. The pond is the rat's exercising ground, its pleasure ground, and its store; it keeps breathing holes in the ice, and to prevent these freezing up it stops them with a ball of clay or of moss, visiting them from time to time to smell the pure outside air, or to breathe it at leisure. In summer it digs holes in the banks of rivers, and in these it nestles its young thrice in a season. Its fecundity preserves its race from extinction. Its great losses are not due to the fortune of war alone; inundations, exceptionally severe winters, and accidents of which the origins are unknown, often carry desolation into the army of muskrats—fortunately the only kind of rat we have here. Our water-rats require water, and when they have none, which happens if the small lakes they have chosen in autumn for their abodes freeze up, they die of

starvation, or pressed by hunger they eat one another. If for one reason they require some water, for another they may have too much, for now and again they must land, which they cannot do when the country is flooded. They die, too, when, in spite of their skill and watchfulness, frost is so intense as to close up their breathing holes.

Next the *genus* beaver (*Fiber*), of which the two species are so useful, I place the *genus arvicola* having five species. These are:

Wilson's Meadow-Mouse—*Arvicola Pennsylvanicus.*
Northern Meadow-Mouse—*Arvicola Borealis.*
Back's Lemming—*Arvicola* (*Georychus*) *Trimucronatus.*
Hudson's Bay Lemming—*Arvicola* (*Georychus*) *Hudsonius.*
The Greenland Lemming—*Arvicola* (*Georychus*) *Groelandicus.*

These five small quadrupeds have more than one point of resemblance.

The first, the smallest of all, is barely more than three and a half inches long; while the last, the largest of all, is not much longer than six inches. All five are found even in the Arctic regions. There, at all events, these little workers, who are also reapers, can injure no one, whereas the little field mouse often brings ruin into our cultivated fields, and the injury is not compensated for in any way; no one dreams of profitting by their fur, extremely fine though it be, unless it be certain Indian jugglers who put the skin in their *medicine bags*. The Greenland Lemming becomes rather white in winter, but never assumes the brilliant whiteness of the ermine.

The American Field Mouse, *Mus Leucopus*, different from the common European mouse, but similar to the field mouse of the old continent, is very numerous here. It gets into all parts of houses, and amongst other inconveniences, makes a very disagreeable noise. This kind of mouse has also a mania for stealing a quantity of small things, particularly grain and other food; but what is more extraordinary is that it does not store the stolen property either in its dwelling, or even near it. One morning, after a cold winter night, on taking up one of my mocassins it appeared to be heavier than usual. Being very cold I did not wait to examine it, but proceeded to put it on, when, behold, my foot came against a collection of things which naturally should not have been in the mocassin. On looking

at them, I found grains of barley, peelings and chips of potatoes, and rubbish, including even fish bones. To account for this curious collection, it must be told that to fish and potatoes, making our ordinary meal, we had added, on the previous day, the luxury of barley broth. Our proficiency as housemaids did not go so far as to remove all traces of the cooking that was done in the same room, for we had but one. It will be understood, then, how fish, barley and potatoes made their appearance in the rubbish placed by the mouse, during the night, in the mocassin. In the course of one night these little quadrupeds will remove a bulk larger than themselves, and as they do not use travelling bags, and as there is not always much that they can pilfer, it may be concluded that several of them unite their efforts to work for one store. They are a regular plague. Here at Red River, they are so numerous that they injure the standing crops, as well as consume and steal the grain after it has been gathered in. This thieving disposition was of unexpected service to us this year, however. The grasshoppers exhausted our supply of a pea that we were cultivating with success; we put the last of it in the ground in spring; the grasshoppers ate it, and it was thought there was no more to be had in the country; but at St. Norbert, where for several years it had been found impossible to cultivate this kind of pea, there was found a considerable supply concealed by mice on the shelves of an old altar that had been left over the vault of the church.

The Labrador jumping mouse (*Meriones Labradorius*) also frequents the Northern Department as far as Great Slave Lake. Here, as elsewhere, this little rodent is remarkable for the extreme length of its hind legs, and the still more exaggerated length of its tail, which exceeds the head and body together. This rat is from four to five inches long, and jumps with surprising agility and quickness. The long tail, generally pliant, is stiffened at length when the animal is jumping, and then the hair on it gives it a curious appearance.

The Northern Department also furnishes five species of marmots enumerated below:

The Weenusk or Quebec Marmot—*Arctomys Empetra.*
The Whistler—*Arctomys Pruinosus.*
Parry's Marmot—*Arctomys Spermophilus Parryi.*
The Tawny Marmot—*Arctomys Spermophilus Richardsonii.*

Franklin's Marmot—*Arctomys Spermophilus Franklinii.*

The Leopard—*Arctomys Spermophilus Hoodii.*

The Quebec marmot measures from ten to twenty inches, and is found throughout the eastern portion of the Department, and also in the Rocky Mountains : the western districts are probably without it. The fur, without being of remarkable quality, is yet an article of commerce. The number killed amounts to only a few hundreds, which proves that the fur is neither valuable nor much sought after.

The mountain marmot, the Canadian Whistler, is found in this country only in the Rocky Mountains. It lives in the slopes of sandhills, in which it burrows. It forages in autumn, as well for food, as to furnish its dwelling.

The fur of the Whistler, although of little importance in commerce, is in much request, in its native country, for its warm and lasting qualities. Several skins sewn together make a robe with which one may face cold, and that lasts for years.

The remaining four species of marmots that are to be found here, are in no way interesting, unless by breaking the monotony of our great solitudes.

These quadrupeds are like squirrels, but without their agility. All of them live in holes, whence they come out from either choice or necessity, and to which they fly on the least sign of danger.

The flesh of the Tawny is very palatable. Indians and *voyageurs* feed on it willingly, particularly when large game fails them.

The *genus Sciurus* is represented here by only three species:

The Hackee—*Sciurus (Tamias) Lysteri.*

The Four-banded Pouched Squirrel—*Sciurus (Tamias) Quadrivittatus.*

The Chickaree—*Sciurus Hudsonius.*

The first two species do not exceed five or six inches in length. They climb trees with great facility, are full of life and spirits during summer, but during winter never leave their retreat.

The Chickaree is larger than the other two species, measuring from eight to nine inches. Its color is greyish brown; it makes its nest in the bottom of the largest trees, arranging several passages by which to leave its dwelling to enjoy its frolics on the branches.

Besides these, we have two varieties of flying squirrels. The smaller one, *Pteromys Sabrinus*, is met with in the south-eastern part of the Department, and the other, *Pteromys Sabrinus Alpina*,

is an inhabitant of the Rocky Mountains. Neither of them has the power of flying, properly so called ; but membranes joining their fore paws to their hinder ones, act as wings or parachutes, and enable them to spring from one tree to another at a considerable distance, but their flight is inclined downwards.

To complete the enumeration of rodents provided with perfect *clavicles*, there remains to be mentioned a species of sand rat, the Mole-shaped Sand Rat, *Geomys Talpoides*, which lives in extensive burrows that it makes in the form of galleries. Although resembling the mole, this animal cannot live on earth-worms, for there are none of these in our latitudes. It uses its pouches or cheeks for carrying earth from the galleries, which it begins to clean out as soon as the snow melts, and until the thawing of the soil enables it to add new galleries to those already made. None of these animals are valued in this country. In times of scarcity all of them are eaten, but they are not sought after by our Indian epicures.

The *Section* of rodents, embracing those having imperfect *clavicles*, first offers to our attention the *Hystrix Pilosus*, the Canada Porcupine, of about thirty inches in length. The coat of this animal is composed of three kinds of hair : that next its skin is of a dirty brown color ; then come longer hairs either white, black or party-colored, scattered through the under coating, and lastly the quills which are characteristic of the animal ; these cover the whole body from the nape of the neck where they are shorter, closer and stiffer, to the haunches, where they are longer and more supple.

Porcupine flesh is excellent, and much sought after not only by Indians, but, also, by others who have tasted it. This animal is a very slow mover and a poor traveller, for it spends whole weeks in one place, or in so limited a space, that Indians having once seen it, put off hunting it for several days, knowing well that it will not escape from them. The trail of its tail on snow betrays its presence, as does also the damage done by its incisors to the branches and bark of trees upon which it lives. It is fondest of the grey pine, *pinus banksiana*, and selects localities in which this species of tree abounds. The cowardly porcupine's only defence are its quills, not that it can lance them against an enemy like javelins, but from the danger there is in seizing the animal, for the quills are very sharp pointed, and barbed, and work themselves deeper into the flesh as soon as they have penetrated the skin. When one's dog attacks a porcupine

it is necessary to extract the quills from his mouth, otherwise these little darts may cause the death of the dog. Such often happens in the case of wolves attacking porcupines.

The quills, dyed, and of their natural color, make very rich embroidery work of exceptional endurance. The women of certain Indian tribes and some of our Half-breeds excel in this kind of work.

There remains for me to notice four species of the order of rodents that belong to the genus *Lepus*. These are—

The American Hare—*Lepus Americanus.*
The Polar Hare—*Lepus Glacialis.*
The Prairie Hare—*Lepus Virginianus.*
The Little Chief Hare—*Lepus Lagomys Princeps.*

The American hare abounds, periodically, throughout the extent of the Northern Department: it occasionally appears in prodigious numbers; but it is a curious fact that it disappears almost entirely from time to time, and then again multiplies, increasing for three or four years, and once more there is a period of abundance, and again they disappear. The periodicity is sufficiently regular for it to be foretold with tolerable accuracy when the hares are to be numerous and when scarce. Their numbers, when plentiful, are something fabulous. One need not be a first-rate sportsman to shoot a hundred in a day, and a good old woman, who is experienced in setting snares, always exceeds this number. I have heard of twenty-five thousand killed during one winter at a single post of the Company.

The American hare is hardly superior to the European rabbit in size and flavor. Let not the lovers of *hare ragout* envy the luck of those who subsist on hares. Even *their* palates would be very much disappointed if they had no other food during winter than miserable hares, fat or skinny, roasted on the end of a stick, or boiled in a pot. Our hares weigh from four to six pounds, and measure about sixteen or seventeen inches. Of a uniform color in summer, they change their grey for a long white fur in winter. Our rabbit does not burrow, it simply lives amongst clumps of willow or young trees, of which it eats the bark. The skin of this animal is of no value, because it has no substance. In order to make use of it, Indians cut it into strips, which they plait or weave like cloth. This kind of fabric makes extraordinarily warm clothing.

Besides this small hare which inhabits all the woodland of the

Northern Department, there are two other much larger species: the Polar Hare and the Prairie Hare. Each of them attains a length of from twenty to twenty-four inches, and weighs from seven to ten pounds, and sometimes even more. The polar hare is not found to the south of the 64th parallel; and the prairie hare is not found much to the north of the 55th parallel. Both species seem to require vast plains, in which they jump at pleasure; just as the American hare leaps in every direction in the wooded district running from south-east to the north-west between these two plains that, differing so much in character, have, nevertheless, each a species of hare, as each has a species of bear, and a species of buffalo. If the Chipewyans have the largest hares in their country, or Barren-grounds, they have also the smallest hare in the *Lepus Princeps*, or Little Chief. This small animal inhabits the Rocky Mountains, and is found on the eastern slopes between the latitudes within which the American hare is still more abundant. It lives amongst the rocks, where it makes its *form* without burrowing. It leaves its resting-place only in fine weather and to collect provisions against the severe seasons. This hare, if hare it must be called, is only six or seven inches long. This genus, it is known, does not boast of long tails, and the Little Chief's is so small that it may be said to have none at all.

After this rapid glance at the order *Rodentia*, we must pass still more rapidly over the 6th order, *Edentata*, for the Northern Department does not furnish any specimens of it. All our quadrupeds here have good teeth, and our Indians would be as much surprised to see one of the *Edentata*, as they are to see a young civilized man with imperfect teeth.

III. SEVENTH ORDER.

Pachydermata.

The seventh order is, likewise, not indigenous to this country. Of the three families composing the Order, the Proboscidea are entirely absent. No one having yet afforded us the amusement of a menagerie, elephants have never been seen here. Nor are the other families of the order well represented. The only common *Pachydermata* here, are the domestic hogs (*Sus Scropha*); while the horse (*Equus Caballus*), the ass (*Equus Asinus*) and the mule are our only *solipeds*.

What can one say of the pig—unless it be that it is lovable only in the pot or on the table? Nearly six thousand years elapsed before this animal was imported into this country; but it came, about half a century ago, with the first tide of civilization, and as the benificent stream flows northward, the pig advances. Without being exactly a type of good manners and politeness, it appears to be an indispensable companion of civilized man; and soon the porcine race will have spread to the most remote confines of the country. There are no wild boars here. The pig was first imported in 1818, *viâ* Hudson's Bay, from England.

Everybody knows that the horse is not a native of America. The herds of wild horses in the southern and western prairies, are but the descendants of animals that escaped, from the Spaniards, on to the plains of Mexico. I am not aware that there has ever been an unowned herd of horses in the Northern Department, and I cannot fix the period at which the Indians first became possessed of these animals. Some of the Indians have numerous herds,—and proprietor and animal mutually recognize one another, for Indians tame their horses when much younger than is the case among civilized people. Not unfrequently a *yearling* colt carries a small horseman, and thus accustoms itself, if not to harness, at all events to the saddle. The breed soon degenerates amongst Indians who have but a few animals. Bitted almost at birth, overpowered with excessive work, badly fed and quite uncared for, it is not surprising that this noble creature loses its perfection of form, its grace of movement, and the freedom and swiftness of its pace.

On the other hand the Indians' horse acquires extraordinary powers of endurance. Apparently dull and devoid of the tractable spirit that is characteristic of its kind, it gets through its work with a determination and perseverance that surprise all who make use of it. These horses may be wearied, but it is all but impossible to exhaust them; and, as the Half-breeds say, "there is no end to a small Indian horse," because their endurance is really almost endless.

Indians have no stables, and their horses know no other than that which the good God has put over all. It need hardly be said that this stable is not warm in winter. The Indian horse knows as much about oats, or any other kind of grain, as it does about a stable.

There are several fine breeds of horses in Red River Settlement.

Admiration of horses is sufficiently strong among our people to need no encouragement. Here, too, horses generally winter in the open; and it is remarkable that, as a rule, they thrive better than those that are kept in a stable, and fed only on hay.

Of late years, *voyageurs* have brought mules here from the United States, and these get on perfectly well when wintering in the open.

The only ass in the country, about seventeen years ago, was so expensive to its master that they left together; and no other has been here since until last year, when a couple of these animals came to awaken the prairies, again, with the echoes of their powerful voices. These also winter out. The first ass foal born in the Northern Department made its appearance in the spring of 1868.

IV. EIGHTH ORDER.

Ruminantia.

Our vast plains have the advantage of being inhabited by various species of ruminants. All the species of *bisulcated* animals are not to be met with here, but there are sufficient of them to excite the liveliest interest, —for here, as elsewhere, they are of first importance, and they are even absolutely necessary. What would the poor Indians do if they had only the *carnassiers* and *rodents* to supply their wants? These two orders are, certainly at times, the only resource of a great many unhappy Indians, but all anxiously look forward to success in hunting *ruminantia*. And then, the white population of the Northern Department, like all other children of civilization, finds in the eighth order wherewith to satisfy the most indispensable requirements of society.

Two species of foreign ruminants accompanied the blessed tide of civilization into this country.

Below is a synoptic table of the order.

EIGHTH ORDER.—*Ruminantia.*

I. Family. Hornless Ruminants are not found in the Northern Department.

II. Family. Horned Ruminants.	1st Tribe. Solid Horns.	Moose. Cariboo. Stag. Deer—2 species.
	2nd Tribe. Hairy Horns.	No Giraffes.
	3rd Tribe. Hollow Horns.	Antelope. Wild Goat. Wild Sheep. Domestic Sheep. Musk Ox. Bison, or Buffalo. Cow.

As is seen by the table, there is no representative of the first family of ruminants in the Northern Department. The camel, so useful and necessary on the great deserts of Asia and Africa, avoids our frozen plains.

Roebuck are not the same as our deer, for the former have no horns, and the musk kind is essentially different from the musk ox.

Only the first and third *sections* of the three composing the second family of ruminants, are represented in this Department. The second, that of *Hairy-horned Ruminants,* or Giraffes, is not met with.

There are five species of the deer kind and two varieties of these species, with solid horns, in this country:

The Moose—*Curvus Alces.*
The Rein-deer or Cariboo—*Curvus Tarandus.*
The Woodland Rein-deer—*Curvus Tarandus Sylvestris.*
The Barren-grounds Rein-deer—*Curvus Artica.*
The Wapiti—*Curvus Strongyloceros.*
The Black-tailed Deer—*Curvus Macrotis.*
The Long-tailed Deer—*Curvus Leucurus.*

The first species of deer noted is the moose or American elk. It is the largest deer, and a noble and beautiful animal on the whole, although the form of its various parts in detail is not so graceful as that of the common deer. The moose stands higher than the horse, but its body is shorter; otherwise it bears a considerable resemblance to the proud *soliped*, whose tail it has good reason to envy, for it is almost without a tail itself. The absence of this useful ornament is not compensated for by an elegant head. The head is heavy and unsightly, and furnished with a pair of ears that might well be envied by a mule. The male carries enormous horns, which it sheds annually; their weight sometimes exceeds fifty pounds. This heavy and clumsy load does not appear to inconvenience its bearer even in thick woods, nor does it prevent the animal from trotting at an amazingly swift pace.

The flesh of this deer is excellent and, coming after Buffalo meat, is preferable to all of its own kind. The *mufle* (*upper lip*) of a fat young moose would satisfy the palate of the greatest epicure. The nose of the animal is much prolonged, to increase the sense of smell, I suppose, just as the large ears act as acoustic horns. The animal's fine senses of smelling and hearing make hunting it a difficult pursuit, so much so that peculiar expertness and patience are required, unless there is a good covering of snow on the ground. In this case, provided with very large snow-shoes, the hunter can easily overtake the moose, especially when there is a crust on the snow that is not equal to bearing the fugitive's weight. Excepting this circumstance, and overtaking the animal when swimming, moose-hunting is quite an art, and brings out all the tracker's acuteness.

I believe the Cariboo is only a variety of the Lapland rein-deer, and inhabits the Arctic Regions in both the old and new world. Indian traditions make out that it came from one continent to the other, over a bridge supposed to have been the corpse of a giant, tumbled down backwards, having its head resting on the country beyond *lac Froid*, and its heels still resting where it, once, stood in the country where the giant lived. This fable appears to indicate that the cariboo, or rein-deer, frequents both shores of Behring's Straits, and perhaps occasionally ventures on the ice on the straits. The cariboo is not tamed in this country. There are two varieties of them, the *Barren-grounds Rein-deer* and the

Woodland Rein-deer. The former migrates regularly from the shores of the Arctic Ocean to the border of the forest country, where it winters. The Woodland Rein-deer joins the other at this point, and after staying there moves south again to the northern limits I assigned to the prairie country.

Cariboo-hunting is not so difficult as moose-hunting. Advantage is easily taken of the curiosity of the Rein-deer, which invariably approaches any striking object. Availing themselves of the knowledge of this peculiarity, the Esquimaux lay ambushes. The Montagnais kill a great many cariboos, in their country, by surprising herds while crossing small lakes, or by driving the deer into the lakes. The Montagnais attack the herd while swimming, and, without pity, slaughter them by thousands. The small cariboo is also caught, in wooded belts, by means of traps; but in the forest it is invariably killed with the gun.

The Woodland Cariboo, although the larger of the kinds, rarely weighs more than two hundred pounds, while the Barren-grounds Cariboo weighs barely half as much.

The size of the horns varies inversely as the size of the two varieties; and the shapes of the horns are so irregular that two sets are rarely found alike. The female carries horns, and sheds them later than the male does. Cariboo skin makes a very warm robe. The grain of the skin and the hair are so close that clothing of this material has the double advantage of being extremely light and proof against the most intense cold. An inconvenience connected with cariboo robes is that the hair falls out, and although much may come away without sensibly diminishing the value of the robe, the hair sticks to all it touches.

Cariboo flesh is good, but when the animal is thin it is not nourishing; and from this originates the *voyageurs'* saying, "One may eat enough of it to get a stomach-ache, but not enough to support one."

On leaving the country of the cariboo, we enter that of the *Wapiti*. This animal is, as it were, an intermediate species between the Moose and the Cariboo: it resembles the European Stag, but stands higher.

Its flesh is pretty good, but its fat hardens so quickly, that it has to be eaten very hot.

This deer lives in large herds on the prairie, and is an easy prey

to our hunters. The *Wapiti* were fortunately so numerous this year, on both sides of the Red River, to the south of the settlement, that the people of Dakota Territory, and in the north of Minnesota, found them a substitute for Buffalo which, for the first time, entirely failed. Had it not been for the supply of deer, the settlements at rivers Shayenne, *Folle*, and Pembina, would have suffered the horrors of famine. I am assured that these herds are migrating from the south-east. The settlement of the Western States of America is driving these poor beasts towards our uninhabited plains. This accounts for the deer being so numerous in the *Salcs* Valley during the last few years. In their movement, they have almost reached the boundary of our Department, and appear to be a prey to fear at the change of habit necessarily involved in migration. Instead of living, as formerly, in groves of trees, they now seek the open prairie. Although branches of trees are their natural source of food, these poor exiles from more temperate climes, are now reduced to scrape the snow, in winter, like horses, and to feed on the dried grass of the plains. The softest and most pliant leather, and the least likely to harden after being wetted, is that made by the Indians from Wapiti skin, and always called *peau de biche* by the French here. The genus *Cervus* has other representatives in this country, *Macrotis* and *Lancurus*. One is remarkable, at very first sight, for its black tail: this is the *Mule-deer* (*cerf mulet*); the other has a long tail and is the Roe *Chevreuil*, properly so called. These two species are found in the Department, but not so plentifully, for during almost twenty-four years that I have lived here, I have never either seen or tasted them.

The third section is that of the hollow-horned ruminants.

The Prong-horned Antelope—*Antelope Furcifer.*
The Rocky Mountain Goat—*Capra Americana.*
The Rocky Mountain Sheep—*Ovis Montana.*
The Domestic Sheep—*Ovis Aries.*
The Musk-Ox—*Oribus Muschatus.*
The American Bison (or Buffalo)—*Bos Americanus.*
The Domestic Ox—*Taurus.*

The first subject of this section, is the graceful Prong-horned Antelope, that our *voyageurs* always call *le cabri* (the kid). It is certainly not the African gazelle; but without waiting to enquire of what species it is, I will simply remark that it is the fleetest of

our quadrupeds, and probably also the most elegant and graceful. Standing high on its fine limbs, it carries its head well, its large black eyes are brilliant and meek, its movements are energetic, sudden, and repeated springs; it is restless and inquisitive; curiosity, which is baleful to so many innocent creatures, is very fatal to the antelope. The hunter, knowing well that a fleeter steed than his would fail to catch the fugitive, takes advantage of the animal's excessive curiosity, by showing it something that not only fixes its attention, but actually draws it within easy shot of his gun.

The young Antelope is like a kid, and hence probably its name *Cabri*. The resemblance passes off as the animal grows older, with the exception of the hair on the back, which keeps like a goat's; and from this circumstance the Antelope is sometimes called a *goat* by English people here.

There are two ruminants in the Rocky Mountains that never descend on to the plains, at all events in the Northern Department. These are the Rocky Mountain goat and sheep. The wild goat nearly resembles the domestic sheep in size. Its long white wool is silky and beautiful, and would certainly make fine and substantial cloth. The good sisters of St. Anne Lake, having procured a little of the wool, knitted some socks and gloves of it; these were stronger, softer and warmer than those made of common wool. A beard, and fulness of neck, give this animal quite the appearance of a goat, but some naturalists decline to classify it as a goat. Its flesh is disagreeable. It amuses itself on the most rugged peaks of the great mountain chain, leaving the lower eminences to the white sheep. The genus *ovis* is with difficulty recognized in the wild sheep. Its body and coat look like a stag's, but its horns and head are very similar to the domestic ram's. Its flesh is delicious and much sought after.

The domestic sheep first came into this country, in 1833, from Kentucky; since then they have been imported from other places. They thrive very well here, and when we shall have made so much progress as to have manufactories, we shall see the innocent and useful lamb skipping in large flocks on the plains that have hitherto been occupied by deer.

The genus *ovis* brings us to that of *ovibos* or the *Musk-Ox*. This animal is limited to the northernmost part of the continent, and is to be met with on our most icy deserts. It is of the size of a small

ox, and has most remarkable horns; these are very large, and come so close together, at least in the male, as to unite into one horn at their base. I have seen plates, a foot in diameter, made of Musk-Ox horn. This ruminant, like all others in this Department having heavy horns, is almost tail-less. Its short legs do not prevent it from being very fleet; it descends very abrupt declivities with astonishing agility, and climbs them too with very great ease. The rocky character of some of the plains on which it lives does not interfere with its walking or even running. Like the Cariboo, it feeds on herbs and lichens. Providence, who placed this animal in the polar regions and on perfectly woodless plains, has clothed it with the very warmest of coats. The Musk Ox is covered with a double fleece. Long surface hair gives it the appearance of a buffalo, but its coat is longer and more silky, and on its back there is a light colored covering. The under-hair is close and fine wool, and protects the animal against the severity of the climate. Were this wool manufactured, it would make very excellent cloth. As a robe, nothing can be preferable to the Musk Ox hide. I am indebted to a noble friend for one of these robes, made for my sleigh; it is made of four skins; it not only protects me against cold, but I should have regarded it as too luxurious, had it not been given to me as it was.

The Bison frequents our vast plains. A few individuals live in the forest, where they isolate themselves, and grow to a much greater size than those on the prairies. The latter go about in immense herds. About fifty years ago their numbers were fabulously great; they not only occupied our plains, but also a great part of the United States. Settlement has driven them westward as far as the northern branch of the Saskatchewan. Thousands and thousands of these animals have been killed by the numerous Indian tribes, whose sole resource they have been. Civilized man has also made war against them, a war full of amusement, excitement, and profit. During a quarter of a century, and until recent years, I calculate that not less than a million of buffalo were killed annually; but now, their numbers have diminished so much, that last summer and throughout the winter there were none, outside of the Saskatchewan District, within this Department. They are now found only in the extreme west, and I believe that we are just about to see their total extinction in this country. Such an event will

produce great changes, first in the matter of food, and next as regards the habits of the people. No more buffalo,—no more pemmican, no more dried meat, no more prairie hunters;—then, salted meat for journeys, herds of domestic animals, and cultivation on a greater scale. The inconvenience of changing will pass away with time, and be succeeded by real improvement, but during the transition there will be extreme difficulties. I perceive indications of what these trials will be, in White-horse Plains,—a parish a few miles from St. Boniface. During recent years this place has been the principal home of our buffalo hunters, who supplied the colony and the Department with much food, and who never experienced want; but now they are obliged to content themselves with the pittance doled out from the limited stores of charity. But why do these people give themselves up to hunting instead of cultivation? Why? Because man naturally, and often passionately, prefers that which is easy, agreeable, and lucrative, particularly when the preference has become a habit from youth, and was taught by one's parents.

Buffalo hunting, in the days when they were plentiful, was peculiarly exciting. Twice a year, hundreds of families assembled at Red River in large camps on the prairie. Their organization was perfectly judicious, orderly, and suitable to the occasion; their expeditions lasted from eight to ten weeks, during which the men killed game and rode about, the women prepared meat and skins, and all feasted and brought immense quantities of leather, dried meat, fat, and pemmican, to their *loges*. Although the men had the most agreeable and easiest share of the work, good meals, profit and habit inspired the women with quite as strong a liking for these expeditions. Our Half-breeds hunt the buffalo on horseback. When the scouts, or visible signs, indicate that buffalo are near at hand, the horsemen prepare for what they call a hunt (*une course*), mounted on their light steeds—often several hundred together—they allign themselves, and wait with gun on arm, whip in hand, excitement in their breasts, and impatience on their features. At the first signal from their leader, the bold troop moves forward at a gentle canter in the indicated direction. Arrived at the distance which experience has shewn to be the best, the last signal is given, then the whips lash the sides of the horses, these feel increased excitement, and in a few minutes

the dexterous and fearless riders disappear in clouds of dust raised by thousands of fleeing buffalo; and with confusion, that would be frightful but for their well-known dexterity, the hunters rush among the fugitives. Firing goes on at the rate of four or five shots a minute; and sometimes in less than half-an-hour, a thousand of these enormous bison are stretched dead on the ground, where, a few minutes before, they were enjoying the sweet grass. A hunt rarely passes off without some accident; but the skill and agility displayed in the field, are really astonishing. Half-breeds are as much at home on their saddles, when going at full speed, as ordinary hunters would be when standing still.

The *Domestic Ox* is not a native of this country. The stock now here, came from Missouri, in 1825. Oxen are now numerous and much used as beasts of burden; they are harnessed with collar, &c., exactly like horses. I do not know that it is due to this arrangement, but certain it is that they do an immense amount of work. On long journeys, with heavy loads, they last better, and even get over the ground as quickly as horses that are not fed upon grain. Many oxen make four months' journeys at the rate of twenty miles a day.

V. NINTH ORDER.—*Cetacea.*

To conclude this sketch of the mammalia of the Northern Department, I must add a few words about the *Cetacea*. Everyone knows that the Arctic Ocean furnishes the largest examples of this order. While whale-fishing draws the fishermen of all countries beyond Behring's Straits, the poor Esquimaux waits on the coast for the giants to approach; in their frail skin canoes, they often succeed in capturing the whale; and thus, in the midst of the desolation of their country, they secure abundance.

SECOND ARTICLE.—*Birds.*

Having recognized the bounty of Providence, who has furnished the country with the mammalia of which I have just been speaking, let us now regard His goodness in peopling the forest and plains with birds, that, besides affording us pleasure, are extremely

useful. The bird kingdom of the North, is not so rich as that of warmer climates; but we have specimens of all the *orders* of the *class*, in some cases numerous. The following is a synoptic table of the entire class:

SECOND CLASS.—*Birds.*

ORDER.	FAMILY.	TRIBE.	GENUS.	SPECIES.
1st. Rapaces.	I. Diurnæ.	1st. Vulturidæ.	Cathartes	1
		2nd. Falconidæ.	Aquila	3
			Falco	5
			Accipiter	2
			Buteo	4
	II. Nocturnæ.	Strigidæ.	Strix	9
2nd. Insessores.	I. Dentirostres.	1st. Laniadæ.	Lanius	2
			Tyrannus	2
			Tyrannula	3
		2nd. Merulidæ.	Cinclus	1
			Merula	4
			Orpheus	3
		3rd. Sylviadæ.	Erythaca	2
			Sylvicola	7
			Setophaga	2
			Parus	1
			Seiurus	2
			Anthus	1
		4th. Ampelidæ.	Vireo	1
			Bombycilla	2
	II. Conirostres.	1st. Fringillidæ.	Alauda	1
			Emberiza	5
			Fringilla	6
			Pyrgita	1
			Loxia	1
			Pyrrhula	1
			Linaria	2
			Carduelis	1
			Coccothraustes	2
		2nd. Sturnidæ	Molothrus	1
			Dolichonyx	1
			Agelaius	2
			Sturnella	1
			Icterus	1
			Quiscalus	1
			Scolecophagus	1
		3rd. Corvidæ.	Corvus	3
			Garrulus	3

SECOND CLASS.—*Birds.* (Continued.)

ORDER.	FAMILY.	TRIBE.	GENUS.	SPECIES.
3rd. Curtipedes.	I. Climbers.	1st. Picidæ.	Picus	6
			Colaptes	1
			Melanerpes	1
		2nd. Certhiadæ.	Troglodytes	2
	II. Tenuirostres.	3rd. Trochilidæ.	Trochilus	1
	III. Fissirostres. IV.	4th. Hirundinidæ. 5th. Caprimulgidæ. 6th. Halcyonidæ.	Hirundo	5
			Caprimulgus	2
			Alcedo	1
4th. Rasores.		1st. Tetraonidæ. 2nd. Columbidæ.	Tetrao	7
			Columba	2
			Phasianus	1
			Meleagris	1
5th. Grallatores.	I. Curtipennæ.		No Ostriches.	
	II. Pressirostres.		Calidris	1
			Charadrius	3
			Vanellus	1
			Strepsilas	1
	III. Cultirostres.		Grus	2
			Ardea	2
	IV. Longirostres.		Recurvirostra	1
			Numenius	3
			Tringa	9
			Totanus	5
			Limosa	2
			Scolopax	2
	V. Macrodactyles.		Raleus	2
			Fulica	1
			Phalaropus	3
6th. Palmipedes.	I. Divers.		Podiceps	4
			Colymbus	3
			Uria	4
	II. Longipennæ.		Sterna	3
			Larus	13
			Lestris	3
	III. Totipalmæ.	Pelecanidæ.	Pelicanus	2
	IV. Lamellirostres.	**Anatidæ.**	**Anas**	6
			Mareca	1
			Dendronessa	1
			Someteria	2
			Oidemia	3
			Fuligala	5
			Clangula	3
			Harelda	1
			Mergus	3
			Cygnus	2
			Anser	5

I. FIRST ORDER.

Rapaces.

The first order of birds in the table is represented by two families, *Day-Rapaces* and *Night-Rapaces.*

The *day-rapaces* form two tribes: the first—*vultures*, is represented by only a single species. In the second—*falcons*—there are four *genera* of fourteen *species.*

The following are the names of all the species in the first family:—

The Turkey-Vulture—*Cathartes Aura.*
The Golden Eagle—*Aquila Chrysaëtos.*
The Bald Eagle—*Aquila Leucocephela.*
The Osprey Eagle—*Aquila Haliæeta.*
The Peregrine Falcon—*Falco Peregrinus.*
The Gyr-Falcon—*Falco Islandicus.*
The Little Rusty-crowned Falcon—*Falco Sparverius.*
The Pigeon-Hawk—*Falco Columbarius.*
The Merlin—*Falco Æsalon.*
The Goshawk—*Accipiter Palumbarius.*
The Slate-colored Hawk—*Accipiter Pennsylvanicus.*
The Common Buzzard—*Buteo Vulgaris.*
The Red-tailed Buzzard—*Buteo Borealis.*
The Rough-legged Falcon—*Buteo Lagopus.*
The American Hen-Harrier—*Buteo Cyaneus.*

In the foregoing list, there is but one vulture, and it is neither the king of its tribe nor the black vulture;—but it is a brown one, found only in the Saskatchewan district, whither it is attracted probably by the carrion, upon which, alone, it feeds. The vulture is merely a bird of passage: it arrives later than other birds, and hence the belief that it does not come at one flight, but is drawn on gradually by the carcases that engage its attention *en route.*

The Golden Eagle is by far the largest of the three of its species ound here: its home is in the Rocky Mountains.

Plains Indians are passionately fond of the feathers of this bird, of which warriors' plumes are made. The number of feathers in

the plume indicates the number of enemies slain by the *brave* who wears it.

The *Nonne*, or Bald-headed Eagle, abounds everywhere in the Department, and is an early visitor. It is the *Detanitcheo*, or *big bird*, of the Montagnais, who are very fond of its flesh, and with good reason. The aerie of this powerful flyer is always built at the top of a tree, and the apparent negligence with which the nest is put together, gives the idea of accident rather than design ; yet it is firm.

All Indians agree about the following:—Eagles are always in pairs ; when one of the pair happens to be killed, another very soon takes its place, whether the victim may have been male or female, and this will occur twice in succession. It is only when the third partner has been killed that the remaining bird becomes disconsolate, and deserts its aerie. Others, besides Indians, have assured me that they have remarked the same fact. An individual, who was making a great display of his biblical knowledge, found, in the foregoing, a very natural explanation of the verse : "Thy youth is renewed like the eagle's."

The Osprey visits us early in spring. It feeds more exclusively upon fish than the common eagle does ; like all those of its kind, it hovers, and sweeps, beautifully, in mid-air ; and at heights almost beyond the reach of the human eye, its powerful sight marks the prey upon which it swoops down with amazing velocity. It pursues other birds of prey, and obliging them to drop their spoil, catches it before it has reached the earth. The talons of the Osprey are very bent, strong and sharp, to enable them to easily seize living fish, and to lift them out of the water. There is a story, for the truth of which I cannot vouch, that the Osprey seizes its prey so firmly that it has been seen to be drawn down by larger fish than it could raise, and punished for its temerity by drowning.

Besides these three species of *eagles*, the tribe of *falcons* includes three kinds: falcons, properly so-called, vultures and buzzards. The eleven *species* of these three *genera* have too many points of distinction to be enumerated here. All of them are birds of passage, and come, just as far as this country, to feast, here as elsewhere, on flesh and blood. Some of them prefer carrion, others fish, and there are some that satisfy their delicate taste with victims not yet cold.

The family of birds that prey by night—*rapaces nocturnæ*, includes nine species of the *genus strix*, or owl. These are:

The Long-eared Owl—*Strix Otus.*
The Short-eared Owl—*Strix Brachiota.*
The Great Cinereous Owl—*Strix Cinerea.*
The Barred Owl—*Strix Nebulosa.*
The Virginia Horned Owl—*Strix Virginiana.*
The Arctic or White Horned Owl—*Strix Arctica.*
The Great Snowy Owl—*Strix Nyctea.*
The American Hawk Owl—*Strix Funerea.*
Tengmalm's Owl—*Strix Tegmalmi.*

At least eight of these nine night-birds remain in this country, where they live on rapine and destruction. Their chief food consists of small quadrupeds, small birds, hares and rabbits.

The great Cinereous Owl is the largest: it is a handsome, and very strong bird.

The Barred Owl is not so common as the last: it visits this country only accidentally.

The Virginia Horned Owl, which is peculiar to America, I believe, is found everywhere in the Department, and knows how to make its presence known. Its powerful voice is very like that of a man crying at the bottom of a sepulchre.

Its cries, echoing in the peaceful depths of the forest, impart a peculiarly melancholy and uncomfortable character, to the still majesty of night, and on first experience, sometimes make so strong an impression on the mind, as to terrify those who are not accustomed to the plaintive voice. It is related of some *voyageurs* who camped near a burying place, that for nights together they were kept in a most nervously uncomfortable state by the cries of this owl, mistaking its melancholy accents for the bitter wailing of the dead disturbed in their last resting place by the intrusive visit. I readily confess, that I myself have been painfully affected on being suddenly awakened by the cries of this night sentinel of the forest. There is a natural reason for *voyageurs* being troubled and frightened by these cries, for, Indians on the war-path agree to imitate the cry of the Virginia Owl, or of some other animal, as a signal for rallying, or for making a general and unexpected attack on the enemy, who are deceived by the strategem.

The White-horned Owl is a very beautiful bird. Its stay in the Arctic regions, even during summer, tells plainly that it does not dread the light of the sun, for, as every one knows, the benificent orb of the day does not always set in high latitudes. The same remark applies to American and Snowy Owls, which also move towards the frozen ocean during summer. The eyes of these three kinds of owls must be different from those of exclusively night owls. The majority of owls, like Tegmalm's owl, the last on the list, cannot bear light. Judging by the awkward and ridiculous gestures of this friend of night, exposing it to the rays of the sun must be a cruel punishment. Perceiving its helplessness when thus situated, the little birds come round the distressed tyrant, and taking advantage of its plight, amuse themselves at its expense, just as schoolboys would do were they to find a disagreeable master suddenly struck blind and making absurd grimaces. And Tegmalm's owl, also, often disturbs the rest of the *voyageur*.

II. SECOND ORDER.

Insessores or Perchers.

Adopting the classification of the author I am following, the second *order* of birds is called *Insessores*, that is, *perching birds*. The intention of the learned author, in adopting this classification, was not to include under this head all birds who can perch, but merely those which are distinguished: 1st, by having the hind toe jointed in the same plane as those in front; 2nd, by the absence of a kind of hook which alone enables birds of the Rapaces order to tear their food before swallowing it; 3rd, by a small notch in the case of the two characteristic groups of the order, in at least one of the two mandibles, to enable the bird to hold, but not to tear its food, which is almost invariably swallowed whole.

The second order, thus defined, includes two families: the *Dentirostres* and the *Conirostres*.

I. The family of *Dentirostres* is composed of four *tribes*: fourteen *genera* and of thirty-three *species* enumerated below:

Greater Northern Shrike—*Lanius Borealis.*

American Grey Shrike—*Lanius Excubitorides.*

King Bird—*Tyrannus Intrepidus.*
Northern Tyrant—*Tyrannus Borealis.*
Say's Fly-catcher—*Tyrannula Saya.*
Little Tyrant Fly-catcher—*Tyrannuta Pusilla.*
Short-legged Pewit—*Tyrannula Richardsonii.*
American Dipper—*Cinclus Americanus.*
Red-breasted Thrush—*Merula Migratoria.*
Little Tawny Thrush—*Merula Minor.*
Wilson's Thrush—*Merula Wilsonii.*
Hermit Thrush—*Merula Solitaria.*
Thrush-like Mock-bird—*Orpheus Meruloides.*
Fox-colored Mocking Bird—*Orpheus Rufus.*
Cat-bird—*Orpheus Felivox.*
Arctic Blue-bird—*Erythaca Arctica.*
Common Blue-bird—*Erythaca Wilsonii.*
Citron Warbler—*Sylvicola Æstiva.*
Yellow-rump Warbler—*Sylvicola Maculosa.*
Yellow Red-poll Warbler—*Sylvicola Petechia.*
Golden-brown Warbler—*Sylvicola Coronata.*
Black-poll Warbler—*Sylvicola Striata.*
Nashville Worm-eater—*Sylvicola Rubricapilla.*
Tennessee Worm-eater—*Sylvicola Peregrina.*
Yellow-tailed Gnat-catcher—*Setophaga Ruticilla.*
Bonaparte's Gnat-catcher—*Setophaga Bonapartii.*
Black-cap Titmouse—*Parus Articapillus.*
Golden-brown Accentor—*Seiurus Aurocapillus.*
Aquatic Accentor—*Seiurus Aquaticus.*
Reddish-brown Titlark—*Anthus Aquaticus.*
Red-eyed Greenlet—*Vireo Olivaceus.*
European Chatterer—*Bombycilla Garrula.*
Cedar-bird—*Bombycilla Americana.*

I shall not stop to consider these various species, which are interesting only from a scientific point of view, or on account of the pleasure they afford us. Many of them are very beautiful. Except the Black-cap Titmouse, which faces our Arctic winter, all are birds of passage. During the summer, they visit us to display the beauty of their plumage, often very rich and variegated, and to enliven our woods with their chirping and harmonious warbling. When gloomy winter freezes up, as it were, the last warming rays of autumn's sun

all these gentle little travellers turn their backs upon us and seek milder climates ; then they return in spring, to see whether winter has not really killed all, in a country where the cold would have been fatal to themselves.

II. The family of *Conirostra* is divided into three *tribes* of ten *genera*, including the following thirty-four *species* :

Horned or Shore-Lark—*Alauda Cornuta.*
Snow Buntling—*Emberiza Nivalis.*
Lapland Buntling—*Emberiza Lapponica.*
Painted Buntling—*Emberiza Picta.*
Clay-colored Buntling—*Emberiza Pallida.*
Bay-winged Finch—*Fringilla Graminea.*
White-crowned Finch—*Fringilla Leucophrys.*
White-throated Finch—*Fringilla Pennslyanica.*
Fox-colored Finch—*Fringilla Iliaca.*
Black Finch—*Fringilla Hyemalis.*
Crested Purple Finch—*Fringilla Purperea.*
Arctic Ground-finch—*Pyrgita Arctica.*
Pine Bull-finch—*Pyrrhula Enucleator.*
White-winged Crossbill—*Loxia Leucoptera.*
Grey-crowned Linnet—*Linaria Tephrocotis.*
Lesser Red-poll—*Liearia Minor.*
American Gold-finch—*Carduelis Americana.*
Evening Grosbeak—*Coccothraustes Vespertina.*
Rose-breasted Grosbeak—*Coccothraustes Ludoviciana.*
Cowpen or Cuckoo Bunt—*Molothrus Pecoris.*
Sharp-tailed Rice Bird—*Dolychouyx Orizivoros.*
Red-winged Maize Bird—*Agelaius Phœniceus.*
Saffron-headed Maize Bird—*Agelaius Xanthocepalus.*
Crescent Starelet—*Sturnella Ludoviciana.*
Baltimore Hangnest—*Icterus Baltimore.*
Common Purple Boat-tail—*Quiscalus Versicolor.*
Raven—*Corvus Corax.*
Crow—*Corvus Corone.*
Magpie—*Corvus Pica.*
Blue Jay—*Garrulus Cristatus.*
Whisky Jack—*Garrulus Canadensis.*
Short-billed Jay—*Garrulus Brachyrynchus.*

This series of *Passerines* is but little more interesting than the preceding one. Some of them, however, are remarkable for the havoc and ravages they make in our fields. I refer to the starlings and crows. The majority of this family (*Conirostres*) are, also, birds of passage, that visit us in summer ; but there are several exceptions. The Snow Buntling is only absent for a few weeks in mid-winter. The Crossbills, as well as the lesser Red-polls, are more courageous, for they never leave us, even in the severest weather. It is extremely interesting to see these birds fluttering about in numerous flocks, and going, as it were, in front of the snow, whose coming they signal. Who can explain how these frail little birds can live happily through the intense frosts that are heard splitting forest trees ? Next these diminutive inhabitants of our frozen country come the black ravens, at least twice the size of crows. Mr. Raven is not content merely to feel the cold, he appears to defy it. When the storm is at its height, the piercing north wind driving clouds of snow, and nature appears to be threatened with destruction ; when the *bivouac-er*, before a roaring fire, shakes and shivers under the thickest robes,—then, the Raven, holding the swaying branch with vice-like grasp, faces the wind, perched on the highest tree tops, and sounds his defiant Ca', as if he would say to the frozen traveller: " Ca' man,—Ca' ye this cold ?"

Neither do the magpies dread our climate. Although the intense cold paralyzes the jaws, and benumbs the tongue of the traveller, it does not affect the loquacity of this, the prettiest bird that winters with us. Our *voyageurs* call it " *Pie de France*" (French Magpie) keeping the simple name *pie* for the Canadian jay. The last is, so to speak, the door-keeper of the forest, and meets all new comers, as if to enquire for news, and to communicate its own stock, or, at any rate, to break the solitude. In winter and summer, it is a constant attendant at camps, hops, jumps about from branch to branch, joins in the dogs' feast, and very gradually approaches the traveller to beg a share of his repast in payment for the pleasure it has afforded by its presence, and the confidence it displays.

In solitude is discovered the necessity and advantage of society. How often the sight of jays has caused me lively pleasure. I could almost believe that they understood perfectly, how soothing it would have been to me to meet, there, those I loved.

If it is startling to be roused from sleep by the screech of the

Virginia Owl, the Rose-breasted Grosbeak's sweetly melodious song produces a very different effect. The notes of this pretty songster—warbled louder and more harmoniously in the stillness of night,—are delightful to the traveller reposing at the foot of a tree; and they assist him to praise God, and to thank Him for the wonders of creation.

III. THIRD ORDER.

Curtipedes (short-footed).

This order, according to Sir John Richardson's classification, would include the family of *climbers*, as well as the *Passerines*, which have not yet been enumerated. The birds of this order are distinguished by one or other of the following marks: short feet, or beaks more or less complete. The order includes three families: the *Scansores*, the *Tenuirostres*, and the *Fissirostres*.

I. The family of *Climbers* here, includes two *tribes*, four *genera* and ten *species*, as follows:

The Pileated Wood-pecker—*Picus Pileatus.*
The Hairy Wood-pecker—*Picus Villosus.*
The Downy Wood-pecker—*Picus Pubescens.*
The Yellow-bellied Wood-pecker—*Picus Varius.*
The Common Three-toed Wood-pecker—*Picus Tridactylus.*
The Arctic Three-toed Wood-pecker—*Picus Arcticus.*
The Golden-shafted Wood-pecker—*Calaptes Aaratus.*
The Red-headed Wood-pecker—*Melanerpes Erythrocephalus.*
The House Wren—*Troglodytes Adon.*
The Winter Wren—*Troglodytes Hyemalis.*

The importation, in 1867, of the *Parrot* has added another *genus* of this family to those in the Department, but I do not know that it serves any good purpose. Three species of peckers winter here, concealing themselves in holes, which they hollow out in the trunks of trees. We are not indebted to these birds for the possession of *Passerines*. The peckers are extremely active, and when engaged in their work, they become so preoccupied with it that they do not

perceive the danger they may run in pursuing their enemies. The *Winter Wren* which, although so named, leaves us in winter, is our smallest bird, excepting the humming-bird. The latter is the sole representative of the second family of this order.

II. THE FAMILY OF FISSIROSTRES.

The Northern Humming-bird, *Trochilus Colubris*, Sir John Richardson, in his *Fauna Boreali Americana*, gives the following description of a northern humming-bird killed on the plains of Saskatchewan.

"COLOUR. The whole of the *upper plumage* shining gilded "green. *Wings* dusky black, glossed with violet; lateral tail "feathers the same, but considerably darker and glossed more "with purple, particularly beneath; the two middle feathers "entirely green, the next pair edged with green. *Under plumage*: "a black fillet passes from ear to ear and forms a line under the "chin; the upper part of the throat is covered by scale-like feathers "of a brilliant and changeable ruby-red colour, the feathers round "which, towards the breast and on the sides of the neck, are white, "which becomes more obscure on the body, vent and under tail "covers; the sides are dusky but glossed with green.

"FORM: *Bill* perfectly straight in its entire length. *Wings* short; "the quills narrow, and not reaching to the end of the tail; the "fifth, sixth, seventh and eighth quills are very deeply and obliquely notched at the tip of their outward webs, in such a marked "and peculiar manner as to give an idea that the notch was artificial. "The *tail* is rather short, but distinctly forked; the two outer "feathers are nearly equal, the rest gradually diminish; they have "an obtusely pointed form, being narrowed towards their ends; but "those in the middle are broader."

"DIMENSIONS."

	In.	Lin.		In.	Lin.		In.	Lin.
Length, total	3	6	Length of bill above	0	7¼	Length of middle toe	0	2
" of tail	1	1	" of bill to rictus	0	9¼	" of its nail	0	1½
" of wing	1	7	" of tarsus	0	1¾	Depth of fork of tail	0	4

This description sufficiently proves the delicacy and elegance of this aerial dwarf, and, at the same time, the richness and variety of its plumage. Nature seems to have delighted in clothing with grace and beauty, this, the smallest of birds, to which it has entrusted the duty of charming our solitudes.

III. The family of *Fissirostres* includes three *genera* and eight *species* :

The White-bellied Swallow—*Hirundo Bicolor.*
The American or Barn Swallow—*Hirundo Americana.*
White-fronted or Cliff Swallow—*Hirundo Lunifrons.*
The Sand Martin—*Hirundo Riparia.*
The Purple Martin—*Hirundo Purpurea.*
The Whip-poor-Will—*Caprimulgus Vociferus.*
The Pisk—*Caprimulgus Virginianus.*
The Belted King-fisher—*Alcedo Alcyon.*

So we have swallows,—even five species of them. They come to us in a lively, chatty, busy crowd in spring. How merry is their twittering as they salute the first rays of the rising sun ! How active, their irregular and graceful flight !

The species called *Cliff Swallow* generally builds in the small hollows in calcareous strata, where their numerous nests find protection from so many small natural roofs.

Two Indians with whom I was travelling along Athabaska River, offered to regale me with a kind of dish I had never tasted ; I accepted their offer. A short way on, the men turned the boat towards the bank ; I objected, saying we had no time to lose. The men insisted, declaring that in a few minutes they would provide me with an excellent dinner. Having got out of the boat, taking with them the punting poles, they ran towards some calcareous strata at a little distance from the bank, and over which there were thousands of swallows flying about. In a few minutes they returned carrying their caps filled with swallows no bigger than one's thumb, whose tender and rosy skins were not yet covered with the least down, and looking very like small lumps of fat. We continued our voyage, and at dinner time the hunters prepared a frying pan to cook some of their little victims, carefully avoiding to dress them more than was necessary. Our situation renders it almost unneces-

sary for me to add that no spices were put in the pan; yet, I thought the dish delicious, and was convinced that the men had not deceived me in promising to supply me with an excellent dinner. But, I do not say that I did not grieve over the desolation brought to so many families in the little straggling village of flyers. The heart-rending notes of those sorrowing mothers, who had been deprived of the objects of their tender solicitude, produced thoughts and feelings that my rude travelling companions could certainly not suspect while they were greedily devouring the delicate and succulent meal they had prepared.

The Whip-poor-will is a most annoying bird, from the noise it makes all night long with its monotonous notes that *voyageurs* think resemble the words "*Bois Pourri*," but the English ear takes for "whip-poor-will."

But I like the Pisk better, as it catches mosquitoes in the evening on the wing, and swallows at least a few of these gnats, the enemies of *voyageurs*, whose rest they interrupt—even when most required after long journeys and fatigue.

Besides the two preceding species, the family of *Syndactyles* furnishes the belted king-fisher, which feeds on fish it catches, at the surface of the water, while on the wing.

IV.—FOURTH ORDER.

Rasores or Gallinaceous Birds.

The sight of suffering and privation, and man's experience of them, naturally inclines the mind to attach more importance to, and to feel more interest in, that which is useful than that which is pretty and agreeable. And, it will not cause surprise if, in this imperfect sketch of the ornithology of the Northern Department, I place more value on the orders to which I have yet to refer, than on those we have now rapidly glanced at.

The first order which attracts attention, are the Gallinaceous Birds. God, in His bounty, has furnished us—first and foremost—with two *genera* and eight *species* of this order. Man has added, by importation, three species—one allied with an indigenous *genus*,

the two others foreign *genera*. Below are the names of the eleven species of the order:

The Ruffed Grouse—*Tetrao Umbellus.*
The Spotted Grouse—*Tetrao Canadensis.*
The Ptarmigan—*Tetrao (Lagopus) Mutus.*
The Rocky Mountain Spotted Grouse—*Tetrao Franklinii.*
The Willow Grouse—*Tetrao (Lagopus) Saliceti.*
The Rock Grouse—*Tetrao (Lagopus) Rupestris.*
The Prairie Chicken—*Tetrao (Centrocercus) Phasianellus.*
The Passenger Pigeon—*Columba Migratoria.*
The Domestic Pigeon—*Columba Domestica.*
The Domestic Hen—*Phasianus Gallus.*
The Turkey—*Meleagris Gallopavo.*

This short enumeration may cause the remark which preceded it to appear strange, particularly as the three species last named are indigenous. I dare assert, however, that the history of the country supports my statement. What I know of that history forces me to recall some heartr-ending circumstance whenever I hear the word partridge* mentioned. This timid bird abounds in the Department and does not shun its rigors; nor does it avoid man, but has saved the lives of many unfortunate starving people. When the unhappy individual who has already passed through all kinds of trials is at length exhausted and reduced, from impossible or unsuccessful hunting, to extreme misery in the midst of winter horrors, very often has a poor partridge served to support him until more efficient help could be procured. Stories of severe and prolonged starving are not told without some mention of a partridge, at one time or another, serving to feed so many hungry persons.

One evening I was sitting pensive, at the foot of a tree. Two young Crees—travelling companions—were making arrows. Already the shadows of the forest, on a neighboring lake, had almost disappeared. Having no ammunition, our gun had been silent all day. We had no evening meal. Our dinner had been little better than the meal we should have had before it. Nothing was

Partridge is the name by which the grouse is generally known in the North-west. D. R. C.

to be heard but the whittling of knives, trimming arrows. Something moved near us, and the practiced ear of one of the Indians recognized the presence of a partridge. "Be quiet," said he; "if I can finish my arrow before it gets too dark, you will not escape from me." The young Indian hastened his work, and he had barely cut the arrow out in rough, when he rose and discharged it at a partridge perched at a few paces from us. So we secured our supper.

The *genus Tetrao* includes seven species here: two of them are found in all our woods: the Ruffed Grouse, and the Spotted Grouse. One kind frequents the mountains, while the other of these *Lagapedes* prefers stony ground. The two others of the same *sub-genus*, generally frequent the Arctic regions.

The last on the list of *Tetraonidae*, the *Faisan* of *voyageurs* and the *Prairie-Chicken* of the English, inhabits the plains, but a few are found in the woods. The last is probably the most palatable,—its flesh is less insipid than that of other members of the same family. Although the assertion may surprise epicures, I owe it to truth to declare that there is very little flavor in our partridge flesh, and it is certainly not a gastronomic delicacy which led to my talking with feelings of pleasure about our humble and modest *tetrao*.

The willow grouse is undoubtedly the prettiest of the *genus*, and probably the most numerous, for it is seen in vast flocks. The color of its winter dress is in no way different from the brillian white of its bed. It is in the snow that this *Lagoped* sleeps at night, and there, too, it conceals itself to avoid pursuit.

There is but one species of pigeon that frequents this country, and it visits us only in summer. At that season they abound here as they do in Canada, and are an abundant source of food. Already some people in the colony are calculating on the time when these will help in alleviating the famine which is in the country.

Domestic pigeons have been imported, and I have often admired their bravery and endurance in withstanding the rigors of our winters without any artificial protection against the cold. The simplest pigeon house, or the most miserable ruin, is sufficient for them.

Poultry were brought here from Sault Ste. Marie in 1822. We have now all kinds, from the common to the giant Cochin-China (*Shanhai*). Want of grain for their food has much reduced them

this year, but we can still occasionally have a roast fowl and an omelet.

Although a native of America, the turkey is not indigenous here. There are a few in the country—the first having been imported from England by Hudson's Bay. We have no peacocks.

V. FIFTH ORDER.

Grallatores or Waders.

The waders are not represented here by the largest *species* of the *order*.

I. The family of *Brevipennes* is not known here. We have no ostrich, either American or of the old world.

The other four families of the order are represented in the Department, at all events during the warmer months.

II. Of the family of *Pressirostres* there are four *genera* and six *species*, as follows:

The Sanderling—*Calidris Arenaria.*
The American Ring Plover—*Charadrius Semipalmatus.*
The Kildeer Plover—*Charadrius Vociferus.*
The Golden Plover—*Charadrius Pluvialis.*
The Grey Lapwing—*Vanellus Melanogaster.*
The Turnstone—*Strepsilas Interpres.*

These various species of plovers and lapwings are found throughout the Department, and extend along the Arctic coast, where they pass the breeding season, and then return southward to remain until the approach of winter, when they leave definitively.

III. The family of *Cultirostres* includes four species:

The Whooping Crane—*Grus Americana.*
The Brown Crane—*Grus Canadensis.*
The Great Heron—*Ardea Herodias.*
The American Bittern—*Ardea Lentiginosa.*

These four large birds are found throughout the Department. The

heron is not common, but the three others abound. The cranes are valuable as their flesh is good food. It is true that their long stilts are deceptive, and the hunter does not make so good a bag as he might expect on viewing them from a distance.

The White or Whooping Crane measures about four feet in length: standing erect, bill upwards, it is over six feet in height. It rises with difficulty from the ground, and, in its first slow flight, affords an easy mark to the sportsman. It is dangerous when merely wounded.

The Brown Crane, a little smaller than the preceding one, is more palatable.

IV. The family of *Longirostres* is very numerous; it includes six *genera*, subdivided into twenty-two species, as follows:

The American Avoset—*Recurvirostra Americana.*
The Long-billed Curlew—*Numenius Longirostris.*
The Hudsonian Curlew—*Numenius Hudsonicus.*
The Esquimaux Curlew—*Numenius Borealis.*
Douglas' Sandpiper—*Tringa Douglasii.*
The Slender-shanks Sandpiper—*Tringa Himantopus.*
The Semipalmated Sandpiper—*Tringa Semipalmata.*
The Purple Sandpiper—*Tringa Maritima.*
The American Dunlin—*Tringa Alpina.*
Shinz's Sandpiper—*Tringa Schinzii.*
The Pigmy Sandpiper—*Tringa Minuta.*
The Diminutive Sandpiper—*Tringa Pusilla.*
The Knot—*Tringa Cinerea.*
The Semipalmated Tatler—*Totanus Semipalmatus.*
The Tell-tale—*Totanus Vociferus.*
The Yellow-shanks Tatler—*Totanus Flavipes.*
Bartram's Tatler—*Totanus Bartramanis.*
The Green-rump Tatler—*Totanus Chloropygius.*
The Great Marbled-Godwit—*Limosa Fedoa.*
The Hudsonian Godwit—*Limosa Hudsonica.*
The New York Godwit—*Scolopax Novoboracensis.*
Drummond's Snipe.—*Scolopax Drummondii.*

Hunters and sportsmen will permit me to leave to them the task of making out the distinctions between these various species. All

these *chevaliers* (*sandpipers*) *sans peur*, and these snipe or sandpipers *sans reproche*, certainly offer nutritious food. The smallness of their bodies gives little encouragement to our people to pursue them. Our tables are well enough supplied when they carry that which is strictly necessary. Powder and shot are too scarce here to be wasted on such small game, whatever may be its delicacy.

The family of *Macrodactyles* includes here three *genera* and six *species*:

The Yellow-breasted Rail—*Rallus Novoboracencis.*
The Carolina Rail—*Rallus Carolinus.*
The American Coot—*Fulica Americana.*
Wilson's Phalarope—*Phalaropus Wilsonii.*
The Hyperborean Phalarope—*Phalaropus Hyperborius.*
The Flat-billed Phalarope—*Phalaropus Fulicarius.*

The last two species, at least, are found on the islands of the Arctic Ocean, while the others do not go into such high latitudes. The Coot, the largest *species* of this family, is not unworthy of the sportsman, who is often happy to meet with it.

VI. SIXTH ORDER.

Natatores.—Palmipedes.

If the order of *Gallinaceous* birds is peculiarly appreciated by those who are starving in winter, in summer the *palmipedes* may boast of furnishing an abundant supply. In this vast country many people have no other means of support. Nearly all the species of the order attract the attention of sportsmen. Our lakes, our rivers, and even our northern seas are numerously frequented by these *Natatores*. Hardly has the first warmth of Spring melted a little snow, and formed an icy pool, when the *swimmers* enjoy themselves in it, and there wait for the thawing of natural lakes and rivers.

These simple creatures of the good God, obliged to leave us in autumn, when water threatens to freeze up, appear to comply regretfully with this providential law, which is, as it were, the signal

for distress to very many children of the woods. A few of these birds remain with us so long as there remains a pool in which they can plunge, and thus find a means of counterbalancing the coldness of the atmosphere now become intolerable. Such of them as migrate early, assemble in immense flocks, and journey by stages, stopping here and there, as if to mark their affection for these localities; hundreds, and often thousands, are victims to this instinct. But their numerous losses do not prevent them from continuing their habit, or from thus rendering us the great services which they do. Twice a year the arrival of these birds diminishes, and often, at least temporarily, puts an end to the severe fasts of the Indians.

I. The family of *Divers* includes three *genera* and eleven *species*:

The Crested Grebe—*Podiceps Cristatus.*
The Red-necked Grebe—*Podiceps Rubricollis.*
The Horned Grebe—*Podiceps Cornutus.*
The Pied-bill Grebe—*Podiceps Carolinensis.*
The Great Northern Diver—*Colymbus Glacialis.*
The Black-throated Diver—*Colymbus Arcticus.*
The Red-throated Diver—*Colymbus Septentrionalis.*
The Foolish Guillemot—*Uria Troile.*
Brunnich's Guillemot—*Uria Brunnichii.*
The Black Guillemot—*Uria Grylle.*
The Little Guillemot—*Uria Alle.*

This country has four *species* of grebes; they are here called *water-hens* (*poules d'eau*); they have no tails, their legs being placed at the extremity of their bodies; they walk with difficulty; their movement has the appearance of being caused by an injury to their hips, and the Algonquins attribute it to a kick given to the grebe by *Wesakedjan*, the name they give to the *Coot* and also to a fabulous *Being* that takes an important part in all Indian legends. Grebes do not leave the water, so to speak; they make their nests in the reeds and rushes, on the borders of lakes and rivers, where they heave up and down with the water that supports them. These birds make up for bad walking by excelling in swimming.

We have three *species* of *Divers*. The largest is a magnificent bird, thirty-six inches in length; its rich and variegated plumage withstands the action of water so well, that it is skinned to make

bags, which are as pretty as they are useful. Its plaintive and melancholy cry is sometimes like the scream of a man in distress. At sunset, the time of nature's extreme beauty, the echoes of the forest impart a power and expression to their cry, to which it is impossible to be indifferent. Of all our birds the Great Northern Diver is the most difficult to kill; not only does it dive with great ease, but it swims under water with great swiftness, and, in a few seconds, re-appears a long distance away from the spot where the sportsman at first expected to shoot it.

Divers are numerous on all the lakes in this country.

The Guillemots are entirely sea-birds: The Arctic ocean appears to be neither beyond their reach, nor too cold for them.

The second family of our swimmers, the *Longipennes*, or large sailors (*grands voiliers*) is divided into three *genera*, including the following nineteen *species*:

The Greater Tern—*Sterna Hirundo.*
The Arctic Tern—*Sterna Arctica.*
The Black Tern—*Sterna Nigra.*
The Burgomaster Gull—*Larus Glaucus.*
The Arctic Silvery Gull—*Larus Argentatoides.*
The White-winged Silvery Gull—*Larus Leucopterus.*
The Ivory Gull—*Larus Eburneus.*
The Mew, or Common Gull—*Larus Canus.*
The Ring-billed Mew-Gull—*Larus Zonorynchus.*
The Short-billed Mew-Gull—*Larus Brachyrynchus.*
The Kittiwake Gull—*Larus Tridactylus.*
Franklin's Rosy Gull—*Larus Franklinii.*
The Bonapartian Gull—*Larus Bonapartii.*
The Little Gull—*Larus Minutus.*
The Cune-ate tailed Gull—*Larus Rossii.*
The Fork-tailed Gull—*Larus Sabinii.*
The Pomarine Jager—*Lestris Pomarini.*
The Arctic Jager—*Lestris Parasitica.*
Richardson's Jager—*Lestris Richardsonii.*

There is nothing more pleasant on a voyage than to see these *gulls*, *wagels*, or *mews* flying all round about, as if to amuse the passenger. Their flesh is generally excellent; their eggs are also very good, and found in such quantities as to be a valuable resource;

a feast of eggs in an Indian camp is a *tremendous affair*. Some of the *Longipennes* enumerated above, frequent only the open sea; the majority, however, also visit our lakes, upon whose islands they deposit their eggs, apparently in the most careless manner, which results in their being easily found.

III. The third family, the *Totipalmes*, are represented by only one *genus* of two *species*:

The White Pelican—*Pelecanus Onocrotalus.*
The Double-crested Corvorant—*Pelecanus* (*Carbo*) *Dilophus.*

The Pelican is a magnificent bird, except as regards his beak, which, being too large, is rendered still more unsightly by a large pouch hanging from the lower mandible. The flesh of this bird is disgusting; its eggs are no better; no one thinks of looking for them, and this makes it useless for them to lay their eggs, as they do, on islands difficult of access, and on the brink of cascades and rapids.

The Pelican gorges itself with fish, and pockets a quantity, simply to carry it to its nest to feed its young. I have often seen Pelicans, surprised while fishing, throw out as many as three large *White fish* or *Carp* that they had just caught and stored away in the appendage to their enormous bills, which serve as *larders*. It is known how easily fish spoil, and there is no occasion to attempt a description of all that is to be found in their travelling bag; the neighborhood of their habitations is almost unbearable, and if all Pelicans are like ours they are certainly not beautiful emblems, unless as regards their striking whiteness.

The Corvorant, a dark species of Pelican, has a flattened bill. It is of the size of a goose, and is uniformly black.

IV. The family of *Lamellirostres* is the largest of all this class of birds, if not as regards *species*, at all events as regards number. This family includes eleven *genera* and thirty-two *species*:

The Shoveller—*Anas Clypeata.*
The Gadwall—*Anas Strepera.*
The Pintail Duck—*Anas Candacuta.*
The Mallard—*Anas Domestica.*
The American Seal—*Anas Crecca.*
The Blue-winged Teal—*Anas Discors.*
The American Widgeon—*Mareca Americana.*

The Summer Duck—*Dendonessa Sponsa.*
The King Duck—*Somateria Spectabilis.*
The Eider—*Somateria Mollissima.*
The Surf Duck—*Oidemia Perspicillata.*
The Velvet Duck—*Oidemia Fusca.*
The American Scoter—*Oidemia Americana.*
The Canvas-back Duck—*Fuligula Valisneria.*
The Pochard—*Fuligula Ferina.*
The Scamp Duck—*Fuligula Marila.*
The Ring-necked Duck—*Fuligula Rufitorques.*
The Ruddy Duck—*Fuligula Rubida.*
The Common Golden Eye—*Clangula Vulgaris.*
The Spirit Duck—*Clangula Albeola.*
The Harlequin Duck—*Clangula Histrionica.*
The Long-tailed Duck—*Harelda Glacialis.*
The Goosander—*Mergus Merganser.*
The Red-breasted Merganser—*Mergus Serrator.*
The Hooded Merganser—*Mergus Cucullatus.*
The Trumpeter Swan—*Cygnus Buccinator.*
Bewick's Swan—*Cygnus Bewickii.*

It is easy to see by this list how rich the family of *Lamellirostres* is; but, to appreciate its full importance, one must know the number of individuals included in some of the species. It is only on our deserts and in our solitudes, that wild birds are seen in such vast numbers. It is not meant that they are to be found everywhere, and at all times; but there are places where at times they are innumerable. A good shot, with a good gun, and abundance of ammunition, could make a bag that would excite incredulity amongst the first sportsmen of civilized countries. One of my friends, Mr. James M'Kay, killed seven hundred ducks in one expedition. Large establishments in the interior, live, for months together, on winged animals. Indian tribes, at some seasons of the year, have no other resource, and these hardy inhabitants of the forest require a large supply of game for their support. Some idea of the quantity required may be gained from the following:—At the Company's establishments, where they subsist on game, the daily ration for one man, is one swan and two ducks, or three geese, or four of the largest ducks. From this, it is easy to imagine how many

would be required for the supply of a large establishment; but, it is not so easy to realize that, in years of plenty, the slaughter is carried on without perceptibly diminishing the source of supply. Where geese alight in their spring migrations, and more especially in those of autumn, the flocks are so vast that a curious saying of our old *voyageurs* is often literally verified. They say "At Rabaska geese are like banks of snow," ("Au Rabaska les oies, c'est comme les bancs de neige.")

Of all ducks the *Teal* is the greatest delicacy. The Mallard, called "*le canard de France*" by the first inhabitants of Canada from its resemblance to the domestic duck, is about the largest. It abounds everywhere.

The Scaup duck, or *canard d'automne*, remains with us for a long time in autumn, and becomes so fat that it has difficulty in getting on the wing; when in this condition, it is a great delicacy, and very nourishing.

The *Caille*, or Spirit Duck, lays its eggs, and sits, in trunks of trees. When the young are old enough to swim, the mother takes them, one at a time, to the bank of a river or neighboring lake.

Our swans are handsome; it is the largest kind of the family, and the least numerous. The harmonious notes of its dying voice have never been heard but by the imagination of the poet.

> "The wild swan's death hymn took the soul
> Of that waste place with joy
> Hidden in sorrow, at first to the ear
> The warble was low, and full and clear."
>
> Tennyson's "The Dying Swan."

Without being a musician, it is easy to perceive that the song of the swan is not a melody.

Of the five species of geese we have, that called *bâtarde* (*Canada goose*) is by far the largest, and passes the period of incubation, as well as the rest of the summer, dispersed throughout the country; its liking is not for this or that latitude, but for the best pasturage.

The other species of geese breed in the Arctic regions; they merely stay here to rest on their long return journey, and to afford us an opportunity to rejoice at the increase in their numbers. They then pass on to winter in milder climates.*

*The following *species* are enumerated by Sir John Richardson:
The Laughing Goose—*Anser Albifrons.*
The Snow Goose—*Anser Hyperboreus.*
The Canada Goose—*Anser Canadensis.*
The Brent Goose—*Anser Bernicla.*
Hutchin's Barnacle Goose—*Anser Hutchinsii.* D. R. C.

THIRD ARTICLE.

Reptiles.

It is without regret that I proclaim the poverty of this country as regards reptiles. We here observe, with pain, the absence of many noble, useful, and pleasant animals. The roaring of the lion is not heard in our forest; the quiet and enduring camel, and the mighty elephant refuse us their services. Amongst the feathered tribe those of the richest plumage and the sweetest notes avoid us. The absence of these, we may regret; but we cannot say so much about reptiles. That the voracious *crocodile* does not delight in our ponds; that the enormous *boa* does not conceal itself in our trees to encircle its victims; that the *rattle-snake* does not shake its noisy tail here, are facts which cannot disquiet me. Nor do I desire to tread on the *asp*, or the *basilisk*; nor am I anxious to live among *dracos*, or to gaze on the changing hues of the *chameleon*.

I subjoin a table shewing the *third class* such as it is, here, within my knowledge.

THIRD CLASS.—*Reptiles.*

Order.	Family.	Genus.	Species.
1st. Chelonia.	I. Land Tortoise.	Testudo.....	2
	II. Fresh Water Tortoise.	Emys.....	1
		Trionix.....	1
	III. Sea Tortoise.		
2nd. Sauria.	1. Crocodilidæ.		
	II. Lacertinidæ.	Lacerta.....	2
	III. Iguanidæ. IV. Geckotidæ. V. Chameœleonidæ. VI. Scincidæ.		
3rd. Ophidia.	I. Anguines.		
	II. Serpentes non virulentæ.	Coluber.....	5
	III. Serpentes virulentæ.		

THIRD CLASS.—*Reptiles.*—Continued.

ORDER.	FAMILY.	GENUS.	SPECIES.
4th. Batrachia.	I. Ranæ.	Rana.....	3
		Hyla.....	1
	II. Bufones.	Bufo.....	1
	III. Salamandræ.	Salamandra.....	1

As is shewn by the foregoing table, the class of reptiles is represented in each of its four orders in this country.

I. FIRST ORDER.

Chelonia.

The Tortoises, while shewing us their bony shields, also convince us of their slowness. We have four species—two of them are oval and small, and belong to the family of *Land Tortoises*. One of the species has a convex *carapace* marked with black and yellow, while the other is flatter, and brown all over. There are very many tortoises in our lakes and swamps—particularly towards the south. The largest kind—which I believe is of the *genus Emys*—attains to a diameter of eighteen inches.

We have a species of Trionix that has a soft *carapace*, and a breast plate that is also very slightly ossified.

I do not think that there are any tortoises in our northern seas.

The species we have, deposit their eggs in the sand on the borders of lakes, choosing, for this purpose, the northern shores which are most exposed to the rays of the sun, so that heat may develope the germ in the eggs. The latter are disagreeable to eat, but the flesh of the animal that lays them is esteemed. When the young are able to move, they have but a few paces to go to plunge in the lake, and there, or upon the neighboring strands, they are left to themselves from their very birth, and have to sustain their existence in the midst of all the difficulties and dangers to which they are exposed.

II. SECOND ORDER.

Sauria.

The species of this order are characterized by changing their skins every spring; but they do not find many conveniences, here, for the annual toilet that nature has prescribed for them. These reptiles are provided with toe-nails, teeth, eye-lids, and articulated jaws; their only representative here is of the second *family* of the *order*. The first family is not met with, for, as I have already stated, we have no crocodiles. Our lizards are of two species—one, rather larger than the other, is marked with green; the other is altogether grey. These animals are very harmless, and are chiefly found in the centre of the prairie region. They are most numerous in the small lakes, and in the neighborhood of the Touch-wood Hills. Their only unpleasant points are their appearance, and desire to approach travellers. When camping, at certain seasons of the year, it is necessary to surround one's tent with a small ditch, of which the inner side is cut vertically, as these lizards climb up only gentle slopes. Unless this precaution is taken, they come into the tents in every direction,—and there are many who would dislike to be either awake, or asleep, on a bed covered with lizards. It is a happy trait in this animal, that in its sympathy with man it awakens *its friend* on the approach of danger; but in this, as in many other matters, the human race displays the ingratitude which characterizes it. I have never yet seen the man who was pleased with the intimacy of the *lacerta*. But this family has no *monitors*. These guardians do not hiss an alarm at the moment of danger. And we have no more *scaled* monitors than we have *sheeted* ones.

III. THIRD ORDER.

Ophidia.

The order of Ophidia is hardly any richer than the preceding. We have neither *blind-worms* (*orvets*) nor venomous serpents. Here the order is limited to the genus, *coluber*, of non-venomous serpents; and, in it, we have but five kinds of adders, that much resemble one another, except as regards size and color. More careful investigation

would probably shew that the varieties of size and color do not indicate distinct species, particularly as regards our five kinds of *garter snakes*, which probably belong to one and the same species. Our adders are quite harmless, and abound in the prairie region, where children play with and torture them at leisure, going even so far as to make garters of them, and the more they find, the happier they are. These reptiles are not found in the north west of the Department.

IV. FOURTH ORDER.

Batrachia.

Not only have we a toad, but according to our *voyageurs* everything in nature is a toad, for either ill-temper, or often merely habit, leads them to apply the word "*crapaud*," toad, to everything they mention. We have three families of *Batrachia*. The timid and croaking race of frogs counts three species,—one of these is all green, and the others are either brown or spotted with a variety of shades. We have not got the famous *Wawaron* (*rama mugiens vel taurina, or bull-frog*). Our people are not familiar with the notes of this giant frog, and are curiously impressed by the sound when, in travelling to the south or the east, they hear it for the first time.

The little Green Tree-Frog (*rainette*) hops about harmlessly here.

The second family is represented by the *toad*, which is no more slender-waisted here, than in tropical climates, and is in no way pleasant, or genial looking.

We have a species of reptile which is neither serpent nor lizard, but is, I think, the *Terrestial Salamander*. I have never seen the animal, but from what I have been told, I am led to believe that it should be classed as I have indicated.

FOURTH ARTICLE.

Fish.

The fourth class of vertebrated animals is, by comparison, much the poorest here. Of the eight *orders* composing it, four are entirely wanting. Some are represented by only one *family;* several of

the *families* have only one *genus;* and the majority of the *genera* have only one *species*. But the limited variety does not deprive Icthyological studies, here, of importance. To some extent, the abundance of species makes up for the poverty of the class. Our lakes, and some of our rivers, are really like natural *vivaria*, or according to our Half-breeds—"they are the storehouses of the good God." I subjoin a general table of the class.

FOURTH CLASS.—*Fish.*

Order.	Family.	Genus.	Species.
1st. Acanthopterygii.	1. Tænioideæ.		
	II. Gobioideæ.		
	III. Labroidæ.		
	IV. Percoideæ.	Perca	1
		Lucio-perca	1
		Pomotis	1
		Cottus	3
		Gasterosteus	1
		Sciœna	1
	V. Scomberoideæ.		
	VI. Squammipinnæ.		
	VII. Bouches en Flute.		
2nd. Malacopterygii Abdominalis.	I. Cyprinoideæ.	Cyprinus	5
	II. Esocidæ.	Esox	2
	III. Siluroideæ	Silurus	1
	IV. Salmonoideæ.	Salmo	7
		" Namaycush	1
		" Mackenzii	1
		" (Thymallus)	2
		" (Coregonus)	4
	V. Clupeoideæ.	Clupea	1
		Hiodon	1
3rd. Malacopterygii Subrachiati.	I. Gadoideæ.	Gadus (Lota)	1
		" (Phycis)	1
	II. Platessoideæ.	Pleuronactes (Platessa.)	1
		" (Rhombus)	1
	III. Discoboli.		

FOURTH CLASS.—*Fish.*—Continued.

ORDER.	FAMILY.	GENUS.	SPECIES.
4th. Malacopterygii Apodes.	Anguilliformes.		
Lophobranchii.			
Plectognathi.			
Chondopterygii. Eleutheropomii.	Sturionideæ.	Acipenser.....	2
Chondopterygii. Trematopneontes.	Selachii.		

As is shewn by the table the *osseous* or *Osteopterygii* fish supply only three *orders* here, and the series of *Chondropterygii* or *cartilaginous* fish, is limited to a single *genus* and of one *order*.

I. FIRST ORDER.

Acanthopterygii.

The first order of the series of osseous fish, is composed of such as have spinous dorsals, and is represented here by only one family, the other six being entirely wanting. We have neither Ribbon fish, *Gopre's* Wrasse, Scombers, *Tons*, nor Mackerel. Nor do the families to which the Bandoullieres and Bouches-en-flute belong, frequent our waters. The only family of the order that we have is the Percoideæ, including, here, six *genera* and eight *species*:

The American, Perch—*Perca Flavescens.*
The American Sandre—*Lucio-perca Americana.*
The Northern Pomotis—*Pomotis Vulgaris.*
The Bear Lake Bull-head—*Cottus Cognatus.*
The North Georgian Bull-head—*Cottus Polaris.*
The Six-horned Bull-head—*Cottus Hexacornis.*
The Tiny Burnstickle—*Gasteroteus Concinnus.*
The Malashegané—*Sciæna Richardsonii.*

Of these eight species, four are of no importance to us: these are, the three bull-heads and the burnstickle; the remaining

four, on the contrary, are a great resource. It is true that the Perch and the Pomatis are not found in many waters, but in return the Sandre (*Dore*) is found in nearly all our lakes and rivers, and add greatly to the stock of food in the country. The Malashegané is not found in the highest latitudes: it prefers the southern. Like the Maigres (or true Sciæna,) this fish has the power of producing a noise like the distant beating of a drum, deep in the water. *

It is a good table fish, and is somewhat like turbot, of which it has all the firmness; the Red River breeds an immense number of them, and we are very glad to have them.

II. SECOND ORDER.

Malacoptery gii Abdominalis.

This order is the most numerous of the class, and there are *species* here of each of the five families composing it.

I. The family of *Cyprinoideæ* supplies us with five distinct species:

La Quesche—*Cyprinus* (*Abramis?*) *Smithii.*
The Grey Sucking Carp—*Cyprinus* (*Catastomus*) *Hudsonius.*
The Red Sucking Carp—*Cyprinus* (*Catastomus*) *Forsterianus.*
The Piccouou—*Cyprinus* (*Catastomus*) *Sueurii.*
The Saskatchewan Dace—*Cyprinus* (*Leuciscus*) *Gracilis.*

At the mention of Carp, the people of other countries figure to themselves a good and fine fish; but, here, the impression is quite of another character. When I first came into the country, I talked with gusto about soupe a la Carpe;—an old man who had never tasted soupe a la carpe, but who considered he had, in his time, eaten rather too much of the fish, could not agree with me, and said significantly: "It is useless to talk about it; carp is but carp." I did not at first understand the reason for his dislike: later I had the opportunity and leisure to appreciate the correctness of his

* Of the *malashegané* or *Sciæna* (*corvina*) *Richardsonii*, Sir John Richardson ays: "The remarkable drum-like noise which the maigres, or true sciæna have the power of producing, at a considerable depth in the water, has *not* been ascribed to the corvinal."—D. R. C.

opinion. When one has but one kind of food to eat, when, for example, it is necessary to be satisfied with Carp,—boiled, perhaps in the water it was born in,—without sauce or salt, or addition of any kind—one quickly tires of the fish, and when this is frequently repeated the simple name of the animal suffices to excite repulsion. The head of the carp is, beyond comparison, preferable to the body;—but many heads would be required to satisfy an appetite excited by work and fatigue, and one soon tires of sucking these small bones. All the species abound in this country, and particularly the Red and Grey Suckers. This fish spawns in the month of June, and, several weeks previously, they are seen and killed in great numbers. When spawning is over, particularly in shallows on stony river beds, they assemble in such numbers that their crowded dorsal fins, shewing above the water, make it appear as if all the fish were artificially attached to one another: and they can then be killed with a stick. It is easy to understand that, in such circumstances as these, Indians cannot absolutely starve, but they invariably look upon the necessity for feeding on Carp as starvation. The Montagnais are very fond of raw fish eyes, and as soon as they capture a fish they tear its eyes out and eat them. The vitality of the Carp is so great, that many true tales about it would be regarded as fabulous. A Carp may be frozen, thawed and then decapitated, and yet not die immediately: and they are seen to strike with their tails, and jump about for a long time after they have suffered such mutilation as would be apparently most likely to quiet them, and to cause them immediate death.

II. The second family of the order I am now dealing with is that of the *Æsocidæ*. Of these we have:

The Common Pike—*Esox Lucius.*
The *Maskinongé*—*Esox Estor.*

The two kinds of pike are a good deal like one another. The latter is generally the larger, its color is paler, its scales less oval, and its flavour being milder is more palatable. The pike is the tyrant of fresh water; it swallows other fish, as *they* do insects. The voracity of the pike benefits the hungry, for it takes a bait set under the ice more readily than any other fish. In times of want, the unfortunate sufferer often finds wherewith to satisfy his hunger in a pike that, urged, probably by similar necessity, has taken the

deceptive bait with its perfidious hook. Providence, who has so severely tried us this year, has given a proof of His pity in the unusual take of pike at Lake Winnipeg and Manitobah. The large kind make an excellent dish when there is seasoning to relieve its flavor, and to modify a peculiar taste, and even odor, probably unknown elsewhere, but unmistakable here. Carp-like, Pike are sought after only when all other supplies fail. There are pike in all our lakes, and in some of them magnificent fish. I have weighed some of thirty pounds, and I believe I have seen larger ones. Pike swallow very large fish without doing them the least damage. I have often seen as many as two *White Fish* in the stomachs of pike, and these, together, did not weigh less than five or six pounds. The numerous sharp teeth of the pike inflict a severe wound, not only when the animal bites, but when by accident, and after they have been detached, one pricks oneself.

III. The family of *Siluroideæ* supplies us with only one *species*:

The Mathemeg—*Silurus (Pimelodus) Borealis.*

Our brill (*barbue*) or Cat-fish is little likely to gain favor by its appearance; some Indians call it "Ugly fish," but it is rich, plump and well-flavored. An ordinary Cat-fish weighs from five to twelve pounds. It is much sought after by those who are familiar with its good qualities. Like all of the same family this fish is devoid of scales. Its broad, flat, and nearly square head has earned for it the name *cat*, as its eight beard appendages (barbes) have procured it the name *barbue*. The Cat-fish is not found, I believe, to the north of the Saskatchewan. It swims in the lakes near Red River, and the affluents of that stream, and also in some of the tributaries of Lake Winnipeg. The Cat-fish (or *Land Cod*) is caught with set lines.

IV. The *Salmonoideæ* is by far the most important family we have. It includes the following *species*:

The Common Salmon—*Salmo Salar.*
Ross's Arctic Salmon—*Salmo Rossii.*
The Copper-mine River Salmon—*Salmo Hearnii.*
The Long-finned Char—*Salmo Alipes.*
The Angmalook—*Salmo Nitidus.*
The Masamacush—*Salmo Hoodii.*

The New York Char—*Salmo Fontinalis.*
The Namaycush—*Salmo Namaycush.*
The Inconnu—*Salmo Mackenzii.*
Back's Grayling—*Salmo* (*Thymallus*) *Signifer.*
The Lesser Grayling—*Salmo* (*Thymallus*) *Thymalloides.*
The Attihawmeg—*Salmo* (*Coregonus*) *Albus.*
The Tullibee—*Salmo* (*Coregonus*) *Tullibee.*
The Round-fish—*Salmo* (*Coregonus*) *Quadrilateralis.*
The Bear Lake Herring Salmon—*Salmo* (*Coregonus*) *Lucidus.*

The foregoing enumeration shews that this country is not without representatives of the important family *Salmonoideæ*, and, when it is considered that fifteen out of our thirty-nine species of fish are of this kind, it is easy to understand that their relative importance is even greater than their absolute. All the *Salmonoideæ* are numerous, and many species furnish us with the best table-fish. Our Arctic rivers supply us with three species of *salmon* properly so called. The Common Salmon ascends the streams flowing into Hudson's Bay, not perhaps in the incalculable abundance of the rivers of New-Caledonia, but nevertheless in sufficient quantity to be a valuable resource.

The salmon called after the celebrated navigator Ross, are so plentiful in the Arctic rivers that as many as three thousand three hundred and seventy-eight have been taken at one haul with a net. This number is all the more remarkable when it is considered that the fish are of good size,—measuring as much as thirty-three inches in length, and often weighing ten pounds.

The Copper-mine Rive Salmon are as numerous as the preceding. A poor woman, who was nearly blind, was fishing at the foot of the Bloody Falls (*La chute Sanglante.*) This old Esquimaux was murdered by Hearn's cruel companions—who had, a short time previously, also killed her unfortunate relations. The wretched assassins then took the old woman's spear, or harpoon, and continued to fish with it for salmon. It is in reference to these exceptional circumstances that this *species* (*Hearnii*) of fish is first mentioned. This salmon must be peculiarly palatable for the intelligent and tender-hearted. Hearne concludes the account of the horrible butchery committed by his companions in his presence, by saying: "When the Indians had finished their ruffianly act (*acte de bri-*

gandage) we sat down and made a good meal on fresh salmon." It must be confessed that this sentence is in exquisite taste, and savors, at all events, of salmon.

Besides these three species of salmon, the family supplies us with five kinds of trout. Two of them are limited to Arctic streams, and the others are found in our lakes and clear waters generally, but particularly in such as are rock bound. This fish, like all the others, varies in flavor according to the place where it is found, and the season when it is caught. It may be excellent when taken from one lake, and detestable from another, much sought after in summer, and avoided in winter. The *Namaycush* is a splendid fish. At Great Slave Lake its weight varies from twenty to forty pounds. I have never seen them so large as to satisfy me on this point, but I see no reason to doubt the evidence of the respectable people who make the statement.

Next comes the *Inconnu*. This name was given to the salmon of Mackenzie River, by *voyageurs* who did not recognize its appearance or flavor. The name has since been generally used, and is even Anglicised. This salmon is intermediate between the *Trout* and *White Fish*, and is peculiar to Mackenzie River basin. It is not found elsewhere. It is plentiful in Great Slave Lake, and ascends the river of that name, up to the falls which interrupt navigation. It weighs from five to fifteen pounds. It is not so much thought of as the other *Salmonoideæ*, and those who eat it often say "it is only *inconnu*, in the same sense as they would say of a Cyprinus "it is only carp."

Two kinds of Back's grayling—the prettiest fish we have—sport in the little rapids of our mountain streams. They are also found in Cariboo Lake, and a few other places. These fish are not of so much importance as the others of the same family.

The *Attihawmeg* or *White Fish*, (Salmo Coregonus, Albus) is the most interesting to us. This is hardly fish in the sense referred to above. Without exception, it is uncontestably the most palatable of all our fishes, and is the only one which is tolerable as a sole food. The *Attihawmeg* is found throughout the country; the lakes—large and small, are nearly all frequented by them, and they providentially swarm in some of the little lakes, otherwise, without this resource, many parts of the country would be uninhabitable. I am entitled to speak on the subject, for I have lived for whole years on

White Fish as a principal food, and frequently the only one. It is not to be understood that living wholly upon one kind of dish is not tiring, but this particular fish does not pall, nor does it excite the aversion generally caused by all other kinds.*

The White Fish generally weighs only three or four pounds ; but they are occasionally caught weighing as much as fourteen pounds, and in this case their flesh would delight the most experienced judges of this kind of food. Without dressing or sauce of any kind, these fine fish are much superior to any I have tasted elsewhere, even when most artistically cooked. The white fish spawns in autumn, and this is also the season for great fishing expeditions, although the fish is in its worst condition. The Attihawmeg, caught in autumn, are preserved in a very peculiar but simple manner : a frame work is set up, and on its top strong poles are laid at three feet apart. Small rods, rather longer than the space intervening between the poles, are next prepared. As the fish are thrown on to the bank, a hole is cut through their tail ends, and using this, ten are threaded on to each rod, thus forming what is called a *broche* (a *spit*) the ends of which are placed on two of the poles. The fish, now hanging head downwards, have their throats cut with a slash of a knife, to free the blood, and to allow water to escape readily.

The sharp nights at the end of October, assist to harden the fish, and to preserve them. When the season is not exceptionally warm, hung fish (*à la pente*) is excellent. Of course the flavor is injured by prolonged heat, and naturally it is only in autumn that this process can be adopted.

The *Tulibee* is very like the *White Fish* ; it is, however, inferior, and much less plentiful, and as much may be said about the *Round Fish*, one of the Coregoni, which takes its name from being less wall-sided than the preceding species.

The *Herring Salmon*, which is found in Bear Lake, appears to be intermediate between the *Harengus* and the *Salmo*.

V. The family of *Clupeoideæ* has two *genera*.

The Common Herring—*Clupea Harengus*.
The *Nacacysh*, or Gold-eye—*Hiodon Chrysopsis*.

* Sir John Richardson says : " Though it (white fish) is a rich, fat fish, instead of producing satiety it becomes daily more agreeable to the palate ; and I know from experience, that though deprived of bread and vegetables, one may live wholly upon this fish for months, or even years, without tiring.—D. R. C.

The Common Herring frequents our Arctic sea, but the fishing does not assume the importance there that it does in other places.

In the southern part of the Department, the *Clupeoideœ* furnish us with a pretty little fish, the gold-eye, white and delicate. This little glutton is caught with hook and line, and also with small meshed nets made for them. The Naccaysh measures about twelve inches; it is very fine; has a large mouth; its large and shining scales give it a silvered appearance, and its extremely large eye, with a yellow iris, has won for it its English name "Gold-eye."

In some of our rivers there is another kind of fish which resembles the herring, and is, probably, the *Fresh-water Herring;* and some other small fish that are found in shallows are, perhaps, *Marsh Fish.* I should experience great difficulty in classifying them or in indicating either their *genus* or species.*

III. THIRD ORDER.

Malacopterygii Subrachiati.

Of the three families composing this order we have two here:

I. The *Gadoideœ* furnish us with two *genera* represented by only two species:

The Methy or Burbot—*Gadus (Lota) Maculosus.*

The Spotted Phycis—*Gadus (Phycis) Punctatus.*

Our Loche or Methy is not a fashionable fish, for the following is a common remark in this country: "How is it that you ask us to eat of it; even dogs refuse it?" It is a fact that dogs, however much accustomed to eat fish, will not touch this kind. For myself I have several times eaten it, and I found nothing in its flavor to justify aversion to it. It is not a delicate fish, but when dressed by an average cook, it is equal to the majority of river fish. I think it is the same kind as is called *Queue de poilon* in Canada. It may be truly said that this is not a pleasant fish to look at. Gorged with food, or full of roe, its naturally short body becomes inordinately enlarged; and its tail, very much like that of an eel, matches very badly with the thick body. The Methy has scales, but they are so small, and so deeply embedded in gelatinous epi-

* Sir John Richardson gives the following classification of these two fishes: Hiodon Tergiou.—*Order*—Malacopterygii Abdominalis. *Family*—Clupeoideœ. *Genus*—Hoidon. The notch-fined Hiodon, or Fresh-water Herring.

Amia Ocellicanda. *Order*—Malacopterygii Abdominalis. *Family*—Clupeoideœ. *Genus*—Amia. The Marsh Fish.—D. R. C.

dermis that they can barely be distinguished in very many specimens. This fish is a cause of great annoyance to fishermen in winter : it fixes itself with fishing lines in the most wonderful way, and entangles them most perfectly. When taken out of the water it alternately wriggles and straightens itself so as to make it a difficult task to unhook. Its smooth and sticky skin is so much colder than that of other inhabitants of the water, that the fisherman, who shivers for hours together in the intensest cold on the lakes, is not very happy when he finds a Methy on the line he draws from under the ice. They are generally thrown away to feed crows : only the roe and liver are retained. At the posts in the interior, the roe is pounded, and made into a kind of biscuit, to which whatever name strikes the fancy is given. The liver, which is rich and delicate, is also made into food, unless it becomes necessary to extract the oil from it for lamps, by which one can only half see, and have, besides, anything but an agreeable smell.

The Spotted Phycis is like that of Canada, but is very rare, while the Methy is everywhere plentiful.

II. The second family of the third order includes two species :

The Stellated Flounder—*Pleuronectes* (*Platessa*) *Stellatus.*

The Arctic Turbot—*Pleuronectes* (*Rhombus Glacialis:*

Two kinds of flat fish visit the mouths of Copper-mine, and some other rivers :—one of these is called *Turbot* from its resemblance to the European Turbot.

The family supplying these species does not, that I know of, make an appearance in any of our lakes. A similar remark applies to the family of *Discoboli.*

The fifth order—that of *Lophobranchii*—is also entirely wanting here : we have neither *Pegasi*, nor any kind of fish bearing shields.

The sixth and last order of *osseous* fish—the *Plectoganathi*—which nearly approaches to the cartilaginous class, in the hardy ossification of the skeleton,—is likewise unknown in these parts. Of course we have not got *Sea-hogs*, (*Herissons de mer*) *Boursoufflus* and Sun-fish in our inland lakes, and I am not aware that they frequent the Arctic Ocean.

The second series of fish—the *cartilaginous chodopterygii*, wherever found, is less abundant than the preceding, but here, it is very much less so. Of the two orders that compose the series, the one with fixed gills is not represented at all in this country. We have neither

Sharks, *Hammer-head*, *Saw-fish*. These tyrants of the salt sea do not trouble our fresh water ; I suppose, too, that they do not like our frozen ocean. I have the same idea also about Ray and Lampreys.

IV. SEVENTH ORDER.

Sturionideœ

The seventh order—which is the first of the second series, or that with free gills,—comprehends two *genera*, or families, as follows :—

The Rupert's Land Sturgeon—*Acipenser Rupertcainus.*

The Ruddy Sturgeon—*Acipenser Rubicundus.*

There are Sturgeon in North Amercia as well as in Northern Asia. Not only does the Pacific Ocean send them in crowded shoals into the rivers flowing from this country, but our lakes are not without them. This large fish delights in a part of this territory : it willingly frequents Lake Winnipeg, and nearly all the important rivers flowing into and out of it ; there are some in the lower part of English River, but they do not ascend beyond the fall at Frog Portage, and they try in vain to get over Carp Rapids in Rapid River, a tributary of the Saskatchewan ; so that the neighborhood of Frog Portage is the northern limit to which they reach in the interior of the country. Nor are they found to the west of this point in the same latitude ; but, to the south and east they are generally distributed. In our great central basin they are found in abundance. There are very fine sturgeon in Lake Winnipeg : I have seen them seven feet long and one hundred and fifty pounds in weight. The fish is excellent to eat : it furnishes a great deal of oil, and its air-bladder, simply dried, supplies the very useful isinglass of commerce.

The Ruddy Sturgeon is much smaller than the common sturgeon ; its head is more elongated, and the cartilages are more prominent.

Salt provisions are as yet not much used here, and salt is so dear that salting sturgeon has not hitherto been thought of ; but such a method of preserving them would be more profitable than the plan of merely drying some pieces adopted by the Indians.

FINIS.